Iowa Department of Natural Resources
Draft Title V Operating Permit

Name of Permitted Facility: Van Diest Supply Company
Facility Location: 1434 220th St, Webster City, IA 50595
Air Quality Operating Permit Number: 21-TV-006
Expiration Date: 11/22/2026
Permit Renewal Application Deadline: 5/22/2026

EIQ Number: 92-5221
Facility File Number: 40-01-011

Responsible Official
Name: Lee Trask
Title: Vice President of Manufacturing
Mailing Address: PO Box 610, Webster City, IA 50595
Phone #: 515-832-5691 ex. 4118

Permit Contact Person for the Facility
Name: James Piaszynski
Title: Director of Environmental Compliance
Mailing Address: PO Box 610, Webster City, IA 50595
Phone #: 515-832-7091

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Marnie Stein
11/23/2021

Marnie Stein, Supervisor of Air Operating Permits Section Date
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Abbreviations

acfm........................actual cubic feet per minute
CFR..........................Code of Federal Regulation
CE ...........................control equipment
CEM..........................continuous emission monitor
oF................................degrees Fahrenheit
EIQ ..........................emissions inventory questionnaire
EP ...........................emission point
EU ............................emission unit
gr./dscf .......................grains per dry standard cubic foot
gr./100 cf........................grains per one hundred cubic feet
IAC................................Iowa Administrative Code
IDNR..........................Iowa Department of Natural Resources
MVAC..........................motor vehicle air conditioner
NAICS..........................North American Industry Classification System
NSPS..........................new source performance standard
ppmv ................................parts per million by volume
lb./hr ................................pounds per hour
lb./MMBtu ......................pounds per million British thermal units
SCC..............................Source Classification Codes
scfm..........................standard cubic feet per minute
SIC..............................Standard Industrial Classification
TPY.............................tons per year
USEPA..........................United States Environmental Protection Agency

Pollutants
PM............................particulate matter
PM10.........................particulate matter ten microns or less in diameter
SO2 ............................sulfur dioxide
NOx...........................nitrogen oxides
VOC ..........................volatile organic compound
CO ............................carbon monoxide
HAP ...........................hazardous air pollutant
I. Facility Description and Equipment List

Facility Name: Van Diest Supply Company
Permit Number: 21-TV-006

Facility Description: Agricultural chemicals, (SIC 2879)

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II. Plant-Wide Conditions

Facility Name: Van Diest Supply Company
Permit Number: 21-TV-006

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: 5 years
Commencing on: 11/23/21
Ending on: 11/22/2026

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Emission Limits

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO₂): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter:
No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed on or after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.
For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to be
used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizer or limestone.
4. Covering, at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.
6. Reducing the speed of vehicles traveling over on-property surfaces as necessary to minimize the generation of airborne dusts.

Authority for Requirement: 567 IAC 23.3(2)"c"
III. Emission Point-Specific Conditions

Facility Name: Van Diest Supply Company
Permit Number: 21-TV-006

Emission Point ID Number: EC17-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit Description (EU ID)</th>
<th>Control Equipment (CE ID)</th>
<th>Maximum Rated Capacity</th>
<th>Raw Material</th>
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<td>Baghouse and HEPA Filter (CE EC17-1000)</td>
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<td>Herbicide</td>
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<td>Premix Tank (TK-696)</td>
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Applicable Requirements

**Emission Limits (lb/hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 02-A-235-S1

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.17 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 02-A-235-S1

Pollutant: Volatile Organic Compounds
Emission Limit(s): 22 tons/yr
Authority for Requirement: DNR Construction Permit 02-A-235-S1
Operational Requirements and Associated Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements
A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.
B. For all VOC containing materials used in EC17 Processing Plant, the owner or operator shall record and document the materials used.
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials processed, used, or generated, in the EC17 Processing Plant.
C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
D. The permittee shall produce a maximum of 7.0 million gallons of product in the EC17 Processing Plant per rolling 12-month period.
   (1) The owner or operator shall record on a monthly basis the amount of product produced in the EC17 Processing Plant, in gallons, and calculate and record rolling 12-month totals.

Control Equipment Requirements
E. All process and control equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the control and process equipment for this process.
F. The owner or operator shall operate the control equipment at all times when emissions are vented to them.
G. The differential pressure drop across the Baghouse and HEPA Filter (CE EC17-1000) shall be maintained between 1.0 and 7.0 inches water column except during periods of filter replacement.
   (1) The owner or operator shall collect and record the pressure drop across Baghouse and HEPA Filter (CE EC17-1000), in inches of water, on a daily basis. If the pressure drop across the Baghouse and HEPA Filter (CE EC17-1000) falls outside the range specified above, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the process is not in operation.
Recordkeeping for the EC17 Processing Line VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in the emission limit section of this permit for the EC17 Processing Line. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points EC17-1 and EC17-2 and the EC17 Packaging Line as well as those from miscellaneous sources related to EC17 Processing Line production, including emissions from drum heating, ancillary packaging emissions, laboratory activity, and tank and floor cleaning. The limit also covers emissions from the B12 Packaging Line and Tank TK-22 in building B13 when processing materials from the EC17 Processing Line. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the EC17 Processing Line:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Storage Tanks
- Gas Sweep
- Solids Handling
- Evaporation
- Heating
- Ancillary Packaging Emissions - Ink Jet & Stenciling
- Laboratory Emissions
- Tank Cleaning Emissions
- Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

H. For each product produced in the EC17 Processing Line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition H. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
   (5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct
emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or more recent) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG).

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

I. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition H above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.
J. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
   (2) The daily number of standard and nonstandard batches completed for each product produced.

K. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

L. If the 12-month rolling total of the VOC emissions exceeds 18.0 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit., the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 18.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 18.0 tons, daily recordkeeping will be required per this section of this permit.

NSPS and NESHAP Requirements

M. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

N. All batch process vents that are part of the miscellaneous organic chemical process unit for the EC17 Processing Line shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall identify all process vents that are part of the
miscellaneous organic chemical process unit for the EC17 Processing Line and
document the type (continuous or batch) and group status for each vent, according to
40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2460 (b), the owner or operator shall determine and document
the group status of the batch process vents by determining and summing the
uncontrolled organic HAP emissions from each of the batch process vents within the
process (the EC17 Processing Line) using the procedures specified in §
63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through
(7).

(3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs §
63.2525 (e)(1) through e(3) is met, the owner or operator must keep records of the
information specified in paragraphs (e)(4)(i) through (iv), as applicable:

a. A record of the day each batch was completed and/or the operating hours per day
for continuous operations with hydrogen halide and halogen emissions.
b. A record of whether each batch operated was considered a standard batch.
c. The estimated uncontrolled and controlled emissions for each batch that is
considered to be a nonstandard batch.
d. Records of the daily 365-day rolling summations of emissions, or alternative
records that correlate to the emissions (e.g., number of batches), calculated no less
frequently than monthly.

O. The material stored in the storage tanks that are part of the miscellaneous organic
chemical process unit for the EC17 Processing Line with a capacity greater than or equal
to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per
square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63
Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the group status for the
storage tanks that are part of the miscellaneous organic chemical process unit for
the EC17 Processing Line, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

P. Any wastewater streams that are part of the miscellaneous organic chemical process unit
for the EC17 Processing Line shall operate as a Group 2 Wastewater Streams, as
specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced
therein.

(1) The owner or operator shall meet all of the applicable reporting and recordkeeping
requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525,
and the requirements referenced therein, including applicable requirements specified
in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

Q. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission
point after the compliance date, the owner or operator must comply with the Group 1
requirements beginning on the date the switch occurs and provide notification as
specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An
initial compliance demonstration as specified in this subpart must be conducted within
150 days after the switch occurs. The facility shall obtain the proper permit modifications
for this change as specified in 567 IAC 22.1.

R. The facility shall analyze all changes in the process, formulations, or equipment and
determine if there is a change in applicability for any NSPS or NESHAP subparts for the
EC17 Processing Line.
(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement:  DNR Construction Permit 02-A-235-S1

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:  DNR Construction Permit 02-A-235-S1
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Emission Point Characteristics**
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground):  35
Stack Opening, (inches, dia.): 24
Exhaust Flow Rate (scfm): 1,200
Exhaust Temperature (°F): 74
Discharge Style: Vertical unobstructed

Authority for Requirement:  DNR Construction Permit 02-A-235-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?  Yes ☐ No ☑

Facility Maintained Operation & Maintenance Plan Required?  Yes ☑ No ☐

Compliance Assurance Monitoring (CAM) Plan Required?  Yes ☑ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: EC17-2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit Description (EU ID)</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
<th>Raw Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC17 Storage Tanks (T686 – T693)</td>
<td>None</td>
<td>6,900 gallons</td>
<td>Herbicide</td>
</tr>
<tr>
<td>Pack Tank (TK-694)</td>
<td>None</td>
<td>6,900 gallons</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 gallons/minute</td>
<td></td>
</tr>
</tbody>
</table>

Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 22 tons/yr
Authority for Requirement: DNR Construction Permit 02-A-236-S1

**Operational Limits & Requirements**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**
A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (2) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only store materials for the EC17 Processing Line in the EC17 Storage Tanks.
   (1) For all materials stored in the tanks in the EC17 Tank Farm, the owner or operator shall record and document the tank used and the material stored.
   (2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the storage tanks.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

D. The permittee shall produce a maximum of 7.0 million gallons of product in the EC17 Processing Plant per rolling 12-month period.
   (2) The owner or operator shall record on a monthly basis the amount of product produced in the EC17 Processing Plant, in gallons, and calculate and record rolling 12-month totals.
Recordkeeping for the EC17 Processing Line VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in the emission limit section of this permit for the EC17 Processing Line. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points EC17-1 and EC17-2 and the EC17 Packaging Line as well as those from miscellaneous sources related to EC17 Processing Line production, including emissions from drum heating, ancillary packaging emissions, laboratory activity, and tank and floor cleaning. The limit also covers emissions from the B12 Packaging Line and Tank TK-22 in building B13 when processing materials from the EC17 Processing Line. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the EC17 Processing Line:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation
Heating
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

E. For each product produced in the EC17 Processing Line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(8) The permittee shall identify and document each product produced.
(9) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
(10) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition E. The facility shall document and provide a justification for the value for each input used.
(11) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
(12) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The
permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

h. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used.

i. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or more recent) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

j. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG).

k. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

l. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in §63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

m. For other batch emission episodes in the production of products, appropriate estimation methods as stated in §63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

n. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(13) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(14) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

F. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(2) The permittee shall use the operating scenarios required in Condition E above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.
G. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(3) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(4) The daily number of standard and nonstandard batches completed for each product produced.

H. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(5) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(6) The total amount of VOC emissions for each product produced, in tons.

(7) The total amount of VOC emissions for all products produced, in tons.

(8) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

I. If the 12-month rolling total of the VOC emissions exceeds 18.0 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(5) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.

(6) The total amount of VOC emissions for each product produced, in tons.

(7) The total amount of VOC emissions for all products produced, in tons.

(8) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 18.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 18.0 tons, daily recordkeeping will be required per this section of this permit.

NSPS and NESHAP Requirements

J. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(2) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

K. All batch process vents that are part of the miscellaneous organic chemical process unit for the EC17 Processing Line shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
(4) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the EC17 Processing Line and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(5) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the EC17 Processing Line) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

(6) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525 (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
   e. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
   f. A record of whether each batch operated was considered a standard batch.
   g. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
   h. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

L. The material stored in the storage tanks that are part of the miscellaneous organic chemical process unit for the EC17 Processing Line with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) The owner or operator shall determine and document the group status for the storage tanks that are part of the miscellaneous organic chemical process unit for the EC17 Processing Line, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

M. Any wastewater streams that are part of the miscellaneous organic chemical process unit for the EC17 Processing Line shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.

(2) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

N. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.
O. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the EC17 Processing Line.

(2) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 02-A-236-S1

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 02-A-236-S1
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Emission Point Characteristics**
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 21
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): Displacement
Exhaust Temperature (°F): 74
Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 02-A-236-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number: EC17 Packaging**

**Associated Equipment**

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-EC17-PR1</td>
<td>EU-EC17-PR1</td>
<td>B17 Packing Reservoir</td>
<td>34 gallons</td>
<td>None</td>
<td>19-A-092</td>
</tr>
<tr>
<td>EP-EC17-PL1</td>
<td>EU-EC17-PL1</td>
<td>B17 Packaging Line</td>
<td>12,000 gallons/hr</td>
<td>None</td>
<td>19-A-093</td>
</tr>
</tbody>
</table>

**Raw Material/Fuel:** Herbicide

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 22 tons/yr

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

(1) Emission limits apply to EC17 Processing Line. This limit applies to all of the emission units and emission episodes listed in operational limit section of this permit.

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.

(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials used in EC17 Processing Line, the owner or operator shall record and document the materials used.
C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

D. The permittee shall produce a maximum of 7.0 million gallons of product in the EC17 Processing Plant per rolling 12-month period.
   (1) The owner or operator shall record on a monthly basis the amount of product produced in the EC17 Processing Plant, in gallons, and calculate and record rolling 12-month totals.

Recordkeeping for the EC17 Processing Line VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in Condition 1 of this permit for the EC17 Processing Line. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points EC17-1 and EC17-2 and the EC17 Packaging Line as well as those from miscellaneous sources related to EC17 Processing Line production, including emissions from drum heating, ancillary packaging emissions, laboratory activity, and tank and floor cleaning. The limit also covers emissions from the B12 Packaging Line and Tank TK-22 in building B13 when processing materials from the EC17 Processing Line. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the EC17 Processing Line:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation
Heating
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

E. For each product produced in the EC17 Processing Line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the
The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or more recent) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG).

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.
(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

F. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition 5.E above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

G. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in Condition 1 of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard and nonstandard batches completed for each product produced.

H. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in Condition 1 of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

I. If the 12-month rolling total of the VOC emissions exceeds 18.0 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in Condition 1 of this permit drops below 18.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of
VOC emissions will cease per this section of this permit. If the emissions once again exceed 18.0 tons, daily recordkeeping will be required per this section of this permit.

NSPS and NESHAP Requirements

J. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

K. All batch process vents that are part of the miscellaneous organic chemical process unit for the EC17 Processing Line shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the EC17 Processing Line and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.
   (2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the EC17 Processing Line) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).
   (3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525 (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
      a. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
      b. A record of whether each batch operated was considered a standard batch.
      c. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
      d. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

L. The material stored in the storage tanks that are part of the miscellaneous organic chemical process unit for the EC17 Processing Line with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall determine and document the group status for the storage tanks that are part of the miscellaneous organic chemical process unit for the EC17 Processing Line, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

M. Any wastewater streams that are part of the miscellaneous organic chemical process unit for the EC17 Processing Line shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.
(1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

N. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

O. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the EC17 Processing Line.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒
- Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒
- Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: EC17-EL

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): EC17-EL

Emission Unit vented through this Emission Point: EC17-EL
Emission Unit Description: EC17 Equipment Leaks
Raw Material/Fuel: Herbicide

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements
A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (3) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials used in EC17 Processing Line, the owner or operator shall record and document the materials used.
   (2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials processed, used, or generated, in the EC17 Processing Line.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

D. The equipment used in the EC17 Processing Line shall have a maximum of 84 liquid valves, 14 liquid pumps, 741 connectors, 24 open-ended lines, and 14 liquid sample connections. The process shall not use any gas valves, compressors, agitators, or pressure relief valves. This shall include all of the equipment used in the EC17 Processing Line to
handle any VOC-containing material.

(1) The owner or operator shall count and document the number and types of components used in EC17 Processing Line. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall update the component count whenever the number of components change.

NSPS and NESHAP Requirements

E. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

F. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in in the referenced subparts F, H, or UU.

(1) The permittee shall document the subpart they are complying with, and meet all of the applicable requirements as specified in in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the permittee is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1019 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the permittee shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed.

G. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in ECW processing line.

(3) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 19-A-091
**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 19-A-091
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Monitoring Requirements**
*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

- **Agency Approved Operation & Maintenance Plan Required?**  Yes ☐ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?**  Yes ☐ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?**  Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number:** 14-EL

**Associated Equipment**

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): B14-EL

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Emission Unit vented through this Emission Point: B14-EL

Emission Unit Description: Equipment Leaks from Building 14 (B14) for the Building 37 (B37) Processing Line

Raw Material/Fuel: Herbicide

**Applicable Requirements**

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

None at this time.

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment in B14 for the B37 processing line shall be operated and maintained according to manufacturer specifications and maintenance schedule.

   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials handled in B14 for the B37 processing line, the owner or operator shall record and document the material handled and the origins of the material (i.e. B37 processing lines).

   (3) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials handled in the B14 equipment for the B37 processing line.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

D. The equipment used in B14 for the B37 processing lines shall have a maximum of 30
heavy liquid valves, 3 heavy liquid pumps, 108 heavy liquid connectors and 4 heavy liquid sample connections. The process shall not use any light liquid components, or any gas valves, compressors, agitators, open-ended lines, or pressure relief valves. This shall include all of the equipment used in B14 for the B37 processing lines.

(1) The owner or operator shall count and document the number and types of components used in B14 for the Building 37 (B37) processing lines. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall update the component count whenever the number of components change.

NSPS and NESHAP Requirements

E. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(2) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

F. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in the referenced subparts F, H, or UU.

(2) The permittee shall document the subpart they are complying with, and meet all of the applicable requirements as specified in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the permittee is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1019 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the permittee shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed.

G. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in Building 14 for the B37 processing line.

(4) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 18-A-004
**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 18-A-004
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 4L-BH1

### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Maximum Rated Capacity</th>
<th>Control Equipment</th>
<th>Raw Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>4L Tank 79 Batching Station (EU4L- BBU79)</td>
<td>8,000 lbs/hr</td>
<td>Baghouse (CE4L-BH1)</td>
<td>Herbicide</td>
</tr>
<tr>
<td>4L Tank 79 (EU4L-TK79)</td>
<td>2,000 gallons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4L Tank 80 Batching Station (EU4L-BBU80)</td>
<td>8,000 lbs/hr</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4L Tank 80 (EU4L-TK80)</td>
<td>2,000 gallons</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

**Pollutant: Opacity**

Emission Limit(s): 40% (1)

Authority for Requirement: 567 IAC 23.3(2)"d"

DNR Construction Permit 17-A-080

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

**Pollutant: Particulate Matter (PM$_{2.5}$)**

Emission Limit(s): 0.08 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-080

**Pollutant: Particulate Matter (PM$_{10}$)**

Emission Limit(s): 0.08 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-080

**Pollutant: Particulate Matter (PM)**

Emission Limit(s): 0.08 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

DNR Construction Permit 17-A-080

**Pollutant: Volatile Organic Compounds (VOC)**

Emission Limit(s): 25 tons/yr (2)

Authority for Requirement: DNR Construction Permit 17-A-080

(2) Emission limits apply to 4L and South Flowable (SF) processing lines. This limit applies to the following emission points: EP4L-BH1(i), EPSF-BH1(i), EPSF-BH2(i), EPSF-Vent1(i), EP-B17TF-East(i) (ii), EP-B17TF-West(i) (ii), EPB17-LO(i) (ii), EPB11-LO(i) (ii), EP-B13TF-1(i) (ii), EPB13-LO(i) (ii), and those covered under the 4L Process Line CAP permit(i) and the Building 11 Storage Tanks CAP permit(i) (ii). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L and South Flowable (SF) processing lines.
i) The VOC emission limit only applies to emissions from equipment associated with the production of products produced in the 4L and SF processing lines. This limit does not apply when the equipment is handling materials for the co-production of products in the 4L or SF and EC44 processing lines.

ii) The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the 4L and South Flowable (SF) processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 21 tons/yr (3)
Authority for Requirement: DNR Construction Permit 17-A-080

(3) Emission limits apply to the production of products co-produced in the 4L or SF and EC44 processing lines. This limit applies to the following emission points when products are co-produced in the 4L or SF and EC44 processing lines: EP-EC44(ii), EP4L-BH1, EPSF–BH1, EPSF–BH2, EPSF–Vent1, EP-B17TF-East(ii), EP-B17TF-West(iii), EPB17-LO(iii), EPB11-LO(iii), EP-B13TF-1(iii), EPB13-LO(iii), and those covered under the 4L Process Line CAP permit and the Building 11 Storage Tanks CAP permit(iii). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L or SF and EC44 co-production processing line.

i) The VOC emission limit only applies to emissions from equipment associated with the production of products co-produced in the 4L or SF and EC44 processing lines for emission point EP-EC44. This limit does not apply when the equipment is handling materials for the production of products not co-produced in the 4L or SF and EC44 processing lines.

ii) The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the production of products co-produced in the 4L or SF and EC44 processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.

Operational Requirements and Associated Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements
A. The owner or operator shall operate the control equipment at all times when emissions are vented to them.
B. All process and control equipment for the 4L processing line shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.
C. The differential pressure drop across the baghouse (CE4L-BH1) shall be maintained between 1.0 and 7.0 inches water column except during periods of filter replacement.
   (1) The owner or operator shall collect and record the pressure drop across the baghouse (CE4L-BH1), in inches of water, on a daily basis. If the pressure drop across the...
baghouse (CE4L-BH1) falls outside the range specified above, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the process is not in operation.

D. The permittee shall employ good housekeeping practices for the 4L processing line. Cleanup of liquid spills shall be initiated promptly upon discovery.

**Recordkeeping for the 4L and SF VOC Emission Cap**

The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission limit cap (25.0 tpy) in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products made in the 4L and South Flowable (SF) processing lines:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Gas Sweep
- Solids Handling
- Evaporation from Screens and Tank Evaporation
- Heating
- Bulk Storage Tank Emissions
- Ancillary Packaging Emissions - Ink Jet & Stenciling
- Laboratory Emissions
- Tank Cleaning Emissions
- Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

E. The facility shall document each product produced in the 4L or SF processing line. The facility shall also document whether the product is produced alone in the 4L or SF processing line or co-produced with the EC44.

F. For each product produced in the 4L or SF processing line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition G.5. The facility shall document and provide a justification for the value for each input used.
(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.
g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

G. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.

(3) The permittee shall use the operating scenarios required in Condition G.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

H. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(5) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(6) The daily number of standard or nonstandard batches completed for each product produced.

I. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(9) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(10) The total amount of VOC emissions for each product produced, in tons.

(11) The total amount of VOC emissions for all products produced, in tons.

(12) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

J. If the 12-month rolling total of the VOC emissions exceeds 19.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(9) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.

(10) The total amount of VOC emissions for each product produced, in tons.

(11) The total amount of VOC emissions for all products produced, in tons.

(12) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.
Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 19.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 19.0 tons, daily recordkeeping will be required per this section of this permit.

Recordkeeping for the 4L or SF and EC44 VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission (21.0 tpy) limit cap in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products co-produced in the 4L or SF and EC44 processing lines:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Gas Sweep
- Solids Handling
- Evaporation from Screens and Tank Evaporation
- Heating
- Bulk Storage Tank Emissions
- Ancillary Packaging Emissions - Ink Jet & Stenciling
- Laboratory Emissions
- Tank Cleaning Emissions
- Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

K. The facility shall document each product produced in the EC44 processing line. The facility shall also document whether the product is produced in the EC44 processing line or co-produced with the 4L or SF processing lines.

L. For each product co-produced in the EC44 processing line with the 4L or SF processing lines, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product produced.

(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.

(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition M.5. The facility shall document and provide a justification for the value for each input used.
(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.
For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

M. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.
   (1) The permittee shall use the operating scenarios required in Condition M.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

N. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
   (2) The daily number of standard or nonstandard batches completed for each product produced.

O. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

P. If the 12-month rolling total of the VOC emissions exceeds 17.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.
Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 17.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 17.0 tons, daily recordkeeping will be required per this section of this permit.

NSPS or NESHAP Requirements

Q. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(3) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

R. Upon and after the compliance date for 40 CFR Part 63 Subpart FFFF, all batch process vents that are part of the miscellaneous organic chemical process unit for the 4L processing line shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(7) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the 4L processing line, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(8) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (4L processing line) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

(9) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525s (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:

i. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.

j. A record of whether each batch operated was considered a standard batch.

k. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

l. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

S. Upon the compliance date for 40 CFR Part 63 Subpart FFFF, any continuous process vents that are part of the miscellaneous organic chemical process unit for the 4L processing line shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the 4L processing line, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2455 (b), for each continuous process vent in the 4L processing
T. Upon the compliance date for 40 CFR Part 63 Subpart FFFF, any wastewater streams that are part of the miscellaneous organic chemical process unit for the 4L processing line shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.

(3) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

U. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

V. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the 4L processing line.

(5) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 17-A-080

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 17-A-080
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Emission Point Characteristics**

_The emission point shall conform to the specifications listed below._

- Stack Height, (ft, from the ground): 38
- Stack Opening, (inches, dia.): 16
- Exhaust Flow Rate (scfm): 1,750
- Exhaust Temperature (°F): 120
- Discharge Style: Vertical unobstructed

Authority for Requirement: DNR Construction Permit 17-A-080
The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**

Yes ☐  No ☒

**Facility Maintained Operation & Maintenance Plan Required?**

Yes ☒  No ☐

**Compliance Assurance Monitoring (CAM) Plan Required?**

Yes ☐  No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)
### Emission Point ID Number: 4L Process - Interior

#### Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP4L-TK75</td>
<td>EU4L-TK75</td>
<td>4L Tank 75 PK1</td>
<td>6,000 gallons</td>
<td>None</td>
<td>17-A-081</td>
</tr>
<tr>
<td>EP4L-TK76</td>
<td>EU4L-TK76</td>
<td>4L Tank 76 PK2</td>
<td>6,000 gallons</td>
<td>None</td>
<td>17-A-082</td>
</tr>
<tr>
<td>EP4L-TK77</td>
<td>EU4L-TK77</td>
<td>4L Tank 77 PK3</td>
<td>6,000 gallons</td>
<td>None</td>
<td>17-A-083</td>
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<tr>
<td>EP4L-TK78</td>
<td>EU4L-TK78</td>
<td>4L Tank 78 PK4</td>
<td>1,200 gallons</td>
<td>None</td>
<td>17-A-084</td>
</tr>
<tr>
<td>EP4L-TK81</td>
<td>EU4L-TK81</td>
<td>4L Tank 81 GR1</td>
<td>5,200 gallons</td>
<td>None</td>
<td>17-A-085</td>
</tr>
<tr>
<td>EP4L-TK82</td>
<td>EU4L-TK82</td>
<td>4L Tank 82 GR2</td>
<td>5,200 gallons</td>
<td>None</td>
<td>17-A-086</td>
</tr>
<tr>
<td>EP4L-TK83</td>
<td>EU4L-TK83</td>
<td>4L Tank 83</td>
<td>12,000 gallons</td>
<td>None</td>
<td>17-A-087</td>
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<tr>
<td>EP4L-TK85</td>
<td>EU4L-TK85</td>
<td>4L Tank 85</td>
<td>12,000 gallons</td>
<td>None</td>
<td>17-A-088</td>
</tr>
<tr>
<td>EP4L-TK86</td>
<td>EU4L-TK86</td>
<td>4L Tank 85</td>
<td>12,000 gallons</td>
<td>None</td>
<td>17-A-089</td>
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<tr>
<td>EP4L-TK129</td>
<td>EU4L-TK129</td>
<td>4L Tank 129</td>
<td>12,000 gallons</td>
<td>None</td>
<td>17-A-090</td>
</tr>
<tr>
<td>EP4L-TK130</td>
<td>EU4L-TK130</td>
<td>4L Tank 130</td>
<td>12,000 gallons</td>
<td>None</td>
<td>17-A-091</td>
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<tr>
<td>EP4L-TK131A</td>
<td>EU4L-TK131A</td>
<td>4L Tank 131A</td>
<td>12,000 gallons</td>
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<td>17-A-092</td>
</tr>
<tr>
<td>EP4L-TK131B</td>
<td>EU4L-TK131B</td>
<td>4L Tank 131B</td>
<td>12,000 gallons</td>
<td>None</td>
<td>17-A-093</td>
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<tr>
<td>EP4L-Screener1</td>
<td>EU4L-Screener1</td>
<td>4L Vibratory Screener 1</td>
<td>730 gallons/hr</td>
<td>None</td>
<td>17-A-094</td>
</tr>
<tr>
<td>EP4L-Screener2</td>
<td>EU4L-Screener2</td>
<td>4L Vibratory Screener 2</td>
<td>730 gallons/hr</td>
<td>None</td>
<td>17-A-095</td>
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<tr>
<td>EP4L-OS1</td>
<td>EU4L-OS1</td>
<td>4L Oversize Tank 1 for Vibratory Screener</td>
<td>40 gallons</td>
<td>None</td>
<td>17-A-096</td>
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<tr>
<td>EP4L-OS2</td>
<td>EU4L-OS2</td>
<td>4L Oversize Tank 2 for Vibratory Screener</td>
<td>40 gallons</td>
<td>None</td>
<td>17-A-097</td>
</tr>
<tr>
<td>EP4L-BT1</td>
<td>EU4L-BT1</td>
<td>4L Box Tank 1 for Vibratory Screener</td>
<td>72 gallons</td>
<td>None</td>
<td>17-A-098</td>
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<tr>
<td>EP4L-BT2</td>
<td>EU4L-BT2</td>
<td>4L Box Tank 2 for Vibratory Screener</td>
<td>34 gallons</td>
<td>None</td>
<td>17-A-099</td>
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<tr>
<td>EP4L-PR1</td>
<td>EU4L-PR1</td>
<td>4L Packing Reservoir</td>
<td>34 gallons</td>
<td>None</td>
<td>17-A-100-S1</td>
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</table>
Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds
Emission Limit(s): 25.0 tons/yr (1)
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

(1) Emission limits apply to 4L and South Flowable (SF) processing lines. This limit applies to the following emission points: EP4L-BH1(i), EPSF-BH1(i), EPSF-BH2(i), EPSF-Vent1(i), EP-B17TF-East(ii), EP-B17TF-West(ii), EPB17-LO(i), EPB11-LO(i), EP-B13TF-1(ii), EPB13-LO(i), and those covered under the 4L Process Line CAP permit(i) and the Building 11 Storage Tanks CAP permit(ii). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L and South Flowable (SF) processing lines.

i. The VOC emission limit only applies to emissions from equipment associated with the production of products produced in the 4L and SF processing lines. This limit does not apply when the equipment is handling materials for the production of products in the 4L or SF and EC44 processing lines.

ii. The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the 4L and South Flowable (SF) processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.

Pollutant: Volatile Organic Compounds
Emission Limit(s): 21.0 tons/yr (2)
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

(2) Emission limits apply to the production of products co-produced in the 4L or SF and EC44 processing lines. This limit applies to the following emission points when products are co-produced in the 4L or SF and EC44 processing lines: EP-EC44(i), EP4L-BH1(i), EPSF-BH1(i), EPSF-BH2(i), EPSF-Vent1(i), EP-B17TF-East(ii), EP-B17TF-West(ii), EPB17-LO(i), EPB11-LO(i), EP-B13TF-1(ii), EPB13-LO(i), and those covered under the 4L Process Line CAP permit(i) and the Building 11 Storage Tanks CAP permit(ii). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L or SF and EC44 co-production processing line.

i) The VOC emission limit only applies to emissions from equipment associated with the production of products co-produced in the 4L or SF and EC44 processing lines for emission point EP-EC44. This limit does not apply when the equipment is handling materials for the production of products not co-produced in the 4L or SF and EC44 processing lines.

ii) The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the production of products co-produced in the 4L or SF and EC44 processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.
Pollutant: Volatile Organic Compounds
Emission Limit(s): 17.0 tons/yr (3)
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

(3) Emission limits apply to B37 Processing Plant. This limit applies to all of the emission episodes listed in operational requirements section below.

**Operational Requirements & Associated Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**
A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

   A. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

   B. The owner or operator shall only use the packaging equipment (EU4L-PR1 and EU4LSF-P1) for the materials used in the processing lines for building 37 (B37).

**Recordkeeping for the 4L and SF VOC Emission Cap**
The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission limit cap (25.0 tpy) in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products made in the 4L and South Flowable (SF) processing lines:

Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Bulk Storage Tank Emissions
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions
The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

B. The facility shall document each product produced in the 4L or SF processing line. The facility shall also document whether the product is produced alone in the 4L or SF processing line or co-produced with the EC44.

C. For each product produced in the 4L or SF processing line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product produced.
(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition D.5. The facility shall document and provide a justification for the value for each input used.
(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

h. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

i. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate
equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

j. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

k. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

l. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

m. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

n. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

D. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition D.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.
E. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

   (1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
   (2) The daily number of standard or nonstandard batches completed for each product produced.

F. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

G. If the 12-month rolling total of the VOC emissions exceeds 19.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 19.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 19.0 tons, daily recordkeeping will be required per this section of this permit.

**Recordkeeping for the 4L or SF and EC44 VOC Emission Cap**

The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission (21.0 tpy) limit cap in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products co-produced in the 4L or SF and EC44 processing lines:
Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Bulk Storage Tank Emissions
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

H. The facility shall document each product produced in the EC44 processing line. The facility shall also document whether the product is produced in the EC44 processing line or co-produced with the 4L or SF processing lines.
I. For each product co-produced in the EC44 processing line with the 4L or SF processing lines, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product produced.
(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition J.5. The facility shall document and provide a justification for the value for each input used.
(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.
a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.
(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

J. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition J.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

K. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
(2) The daily number of standard or nonstandard batches completed for each product produced.

L. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

M. If the 12-month rolling total of the VOC emissions exceeds 17.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission
limit cap in the emission limit section of this permit drops below 17.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 17.0 tons, daily recordkeeping will be required per this section of this permit.

Recordkeeping for the Building 37 Processing Plant VOC Emission Cap
The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in the emission limit section of this permit for the Building 37 Processing Plant. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points 37-1, 37-2, 37-3, and 37-4; those listed in the permits for Building 37 – Interior VOC Emissions, as well as those from miscellaneous sources related to B37 production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The limit also covers VOC emissions from storing materials from B37 in the storage tanks in buildings B11, B39 and B42, and packaging and loadout in buildings B11, B14, B39 and B42. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the Building 37 Processing Plant:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

N. For each product produced in the Building 37 Processing Plant, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

1. The permittee shall identify and document each product produced.
2. The permittee shall identify and document each standard and nonstandard batch used to produce each product.
3. The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition O.5. The facility shall document and provide a justification for the value for each input used.
(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.
For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(6) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

O. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition O.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

P. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
(2) The daily number of standard or nonstandard batches completed for each product produced.

Q. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

R. If the 12-month rolling total of the VOC emissions exceeds 13.5 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit
section of this permit., the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 13.5 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 13.5 tons, daily recordkeeping will be required per this section of this permit.

**NSPS or NESHAP Requirements**

S. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing—Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

T. Upon and after the compliance date for 40 CFR Part 63 Subpart FFFF, all batch process vents that are part of the miscellaneous organic chemical process unit for the 4L processing line shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the 4L processing line, according to 40 CFR Part 63 Subpart FFFF, 63.2550.
   (2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the 4L processing line) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).
   (3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525s (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
      a. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
      b. A record of whether each batch operated was considered a standard batch.
      c. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
d. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

U. Upon the compliance date for 40 CFR Part 63 Subpart FFFF, any continuous process vents that are part of the miscellaneous organic chemical process unit for the 4L processing line shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
(1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the 4L processing line, according to 40 CFR Part 63 Subpart FFFF, 63.2550.
(2) As specified in § 63.2455 (b), for each continuous process vent in the 4L processing line, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).

V. After the compliance date for 40 CFR Part 63 Subpart FFFF, the material stored in the storage tanks that are part of the miscellaneous organic chemical process unit for the 4L processing lines with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.
(1) After the compliance date for 40 CFR Part 63 Subpart FFFF, the owner or operator shall determine and document the group status for the storage tanks that are part of the miscellaneous organic chemical process unit for the 4L processing line, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

W. After the compliance date for 40 CFR Part 63 Subpart FFFF, the facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of the miscellaneous organic chemical process unit for the 4L processing line, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550.
(1) Upon the compliance date for 40 CFR Part 63 Subpart FFFF, the owner or operator shall determine and document the group status for the transfer racks that are part of the miscellaneous organic chemical process unit for the 4L processing line, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

X. Upon the compliance date for 40 CFR Part 63 Subpart FFFF, any wastewater streams that are part of the miscellaneous organic chemical process unit for the 4L processing line shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.
(1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).
Y. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

Z. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the 4L processing line.
   (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permits listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 4L-EL

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 4L-EL

Emission Unit vented through this Emission Point: 4L-EL
Emission Unit Description: Equipment Leaks for the 4L Processing Line
Raw Material/Fuel: Herbicide

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Operational Requirements & Associated Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements
A. All process equipment for the 4L processing line shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For each product produced in the 4L processing line, the owner or operator shall identify and document each VOC-containing material used.
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials used in the 4L processing line.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

D. The equipment used in the 4L processing line shall have a maximum of 207 heavy liquid valves, 22 heavy liquid pumps, 1196 connectors, 10 open-ended lines, and 14 heavy liquid sample connections. The process shall not use any light liquid components, gas valves, compressors, agitators, or pressure relief valves. This shall include all of the equipment used in the 4L processing line.
(1) The owner or operator shall count and document the number and types of components used in the 4L processing line. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NSPS 40 CFR Part 60 Subpart VVa, §60.481a, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

NESHAP Subpart FFFF Requirements
E. The facility shall analyze any changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the 4L processing line.
(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

F. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

Authority for Requirement: DNR Construction Permit 17-A-208

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 17-A-208
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Area46-HR

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): Area46-HR

Emission Unit vented through this Emission Point: Area46-HR
Emission Unit Description: Area 46 Haul Roads
Raw Material/Fuel: Fugitive Dust

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: DNR Construction Permit 14-A-537
567 IAC 23.3(2)"c"

Pollutant: Particulate Matter (PM$_{2.5}$)
Emission Limit(s): 7.0 ton/yr
Authority for Requirement: DNR Construction Permit 14-A-537

Pollutant: Particulate Matter (PM$_{10}$)
Emission Limit(s): 12.0 ton/yr
Authority for Requirement: DNR Construction Permit 14-A-537

Pollutant: Particulate Matter (PM)
Emission Limit(s): 22.0 ton/yr
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 14-A-537

Authority for Requirement: DNR Construction Permit 14-A-537
Operational Requirements & Associated Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating limits for this emission unit shall be:

A. All haul road(s) at the facility shall be paved.

B. The haul roads covered under this permit are required to employ best management practices to reasonably prevent the discharge of fugitive dust from all haul roads beyond the lot line of the property on which it is located. These BMP are examples of reasonable practices to minimize the generation of fugitive dust emissions.

**BMP on haul roads include but are not limited to:**

- Limiting truck speed on facility property
- Watering and/or sweeping paved roadways
- Immediately cleaning-up or dampening all material spills on the roadways

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The owner or operator shall determine the silt loading of the paved haul roads for Area 46 monthly with the initial testing being performed within 90 days of the permit issuance date. For each performance test, silt loading sampling shall be done for at least 3 different locations. The three sampled locations shall then be averaged to determine the silt loading average results. The testing shall be completed prior to any cleaning routine done for the paved roads. Silt load testing shall be conducted according to the procedures outlined in AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading and C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples. After two years of silt load testing, the facility may request the Department to reevaluate the silt load sampling frequency requirements.

B. If silt load testing cannot be accomplished because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35° F (1.7° C) or because a representative sample cannot be otherwise obtained, then the testing shall be postponed and accomplished as soon reasonably possible after the scheduled date as the conditions preventing the testing have abated. The facility shall document the justification used for any postposed tests.

C. The owner or operator shall maintain a log for each silt load sampling event that contains, at a minimum, the following:
   a. The date of silt load sampling event;
   b. the location of the sample;
   c. the measured silt content in grams;
d. sample area used for silt load sampling in meters;
e. the silt loading in g/m²
f. the operator’s initials.

D. The owner or operator shall document the distance of each haul road route used for Area 46.

E. The owner or operator shall record each time a truck uses a route for Area 46.

F. The owner or operator shall record on a monthly basis:
   a. The average silt load testing result obtained per 15.A. If silt load testing is not required due to 15.B for any month, the facility may use previous month’s test data for calculating emissions.
   b. The number of trips taken on each haul road route.
   c. The total vehicle miles (VMT) travelled for all trucks used for the Area 46 processes. This shall be accomplished by multiplying the number of trips taken on each haul road route by the distance of the corresponding route and summing the results.
   d. The maximum average truck weight of vehicles used for Area 46 processes (the maximum average truck weight is the average of a full and empty truck for the heaviest truck used for the Area 46 processes).

G. The owner/operator shall calculate and record the monthly PM, PM-10, and PM-2.5 emissions for Area 46 truck traffic according to the formulas and procedures from AP-42 Section 13.2.1 using the data documented in 15.E. The owner or operator shall update monthly the twelve-month rolling total of PM, PM-10, and PM-2.5 emissions by adding up the calculated monthly emissions for the previous twelve months.

H. The owner or operator shall document all best management practices used at the facility to minimize fugitive dust emissions.

Authority for Requirement: DNR Construction Permit 14-A-537

**Monitoring Requirements**
*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

- Agency Approved Operation & Maintenance Plan Required? [Yes] [No] [X]
- Facility Maintained Operation & Maintenance Plan Required? [Yes] [No] [X]
- Compliance Assurance Monitoring (CAM) Plan Required? [Yes] [No] [X]

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: B11-EL

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): B11-EL

Emission Unit vented through this Emission Point: B11-EL
Emission Unit Description: Building 11 Equipment Leaks
Raw Material/Fuel: Herbicide
Rated Capacity: N/A

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permit 17-A-200-S1

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials handled in the Building 11 (B11) equipment, the owner or operator shall record and document the material handled and the origins of the material (i.e. 4L and SF processing lines, Building 37, bulk terminal materials).
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials handled in the B11 equipment.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
D. The equipment used in the B11 tank farm and the associated loadouts shall have a maximum of 135 heavy liquid valves, 22 heavy liquid pumps, 977 heavy liquid connectors, and 17 heavy liquid sample connections. The process shall not use any light liquid components, gas valves, compressors, agitators, open-ended lines, or pressure relief valves. This shall include all of the equipment used in the B11 tank farm and the associated loadouts to handle any VOC-containing material.

(1) The owner or operator shall count and document the number and types of components used in B11. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

E. The equipment used in B11 for the 4L and SF processing lines shall have a maximum of 56 heavy liquid valves, 4 heavy liquid pumps, and 210 connectors. The process shall not use any light liquid components, gas valves, compressors, agitators, open-ended lines, liquid sample connections, or pressure relief valves. This shall include all of the equipment used in building B11 for the 4L and SF processing lines.

(1) The owner or operator shall count and document the number and types of components used in B11 for the 4L and SF processing lines. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

F. The equipment used in B11 for the Building 37 (B37) processing lines shall have a maximum of 2 heavy liquid valves, 2 heavy liquid pumps, 40 heavy liquid connectors, and 2 heavy liquid sample connections. The process shall not use any light liquid components, gas valves, compressors, agitators, open-ended lines, or pressure relief valves. This shall include all of the equipment used in building B11 for the B37 processing lines.

(1) The owner or operator shall count and document the number and types of components used in B11 for the B37 processing line. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference
text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

**NSPS and NESHAP Requirements**

**G.** The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing—Subpart FFFF.

(3) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

**H.** The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in in the referenced subparts F, H, or UU.

(1) The permittee shall document the subpart they are complying with, and meet all of the applicable requirements as specified in in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the permittee is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1019 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the permittee shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed.

**I.** The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in Building B11.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement:  DNR Construction Permit 17-A-200-S1

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:  DNR Construction Permit 17-A-200-S1

40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Monitoring Requirements**  
*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

Agency Approved Operation & Maintenance Plan Required?  
Yes ☐  No ☒

Facility Maintained Operation & Maintenance Plan Required?  
Yes ☐  No ☒

Compliance Assurance Monitoring (CAM) Plan Required?  
Yes ☐  No ☒

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Number: Building 11 Loadout and Packaging

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit Description, EU ID</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
<th>Raw Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building 11 (B11) Product Tanker Loadout, EU-B11-LO</td>
<td>None</td>
<td>2,500 gallons/hr</td>
<td>Herbicide</td>
</tr>
<tr>
<td>Building 11 (B11) Product Packaging and Mini-bulk Loadout, EU-B11- Packaging</td>
<td>None</td>
<td>2,500 gallons/hr</td>
<td>Herbicide</td>
</tr>
</tbody>
</table>

Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 25 tons/yr

Authority for Requirement: DNR Construction Permit 17-A-178-S2

1. Emission limits apply to the 4L and South Flowable (SF) processing lines. This limit applies to the following emission points: EP4L-BH1, EPSF-BH1, EPSF-BH2, EPSF-Vent1, EP-B17TF-East, EP-B17TF-West, EPB17-LO, EPB11-LO, EP-B13TF-1, EPB13-LO, and those covered under the 4L Process Line CAP permit and the Building 11 Storage Tanks CAP permit. The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L and South Flowable (SF) processing lines.

   i. The VOC emission limit only applies to emissions from equipment associated with the production of products produced in the 4L or SF processing lines. This limit does not apply when the equipment is handling materials for the production of products not co-produced in the 4L or SF and EC44 processing lines.

   ii. The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the 4L and South Flowable (SF) processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 21 tons/yr

Authority for Requirement: DNR Construction Permit 17-A-178-S2

2. Emission limits apply to the production of products co-produced in the 4L or SF and EC44 processing lines. This limit applies to the following emission points when products are co-produced in the 4L or SF and EC44 processing lines: EP-EC44, EP4L-BH1, EPSF-BH1, EPSF-BH2, EPSF-Vent1, EP-B17TF-East, EP-B17TF-West, EPB17-LO, EPB11-LO, EP-B13TF-1, EPB13-LO, and those covered under the 4L Process Line CAP permit and the Building 11 Storage Tanks CAP permit. The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L or SF and EC44 co-production processing line.

   i. The VOC emission limit only applies to emissions from equipment associated with the production of products co-produced in the 4L or SF and EC44 processing lines for emission point EP-EC44. This limit does not apply when the equipment is handling materials for the production of products not co-produced in the 4L or SF and EC44 processing lines.

   ii. The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the production of products co-produced in the 4L or SF and EC44
processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 17 tons/yr (3)
Authority for Requirement: DNR Construction Permit 17-A-178-S2
(3) Emission limits apply to B37 Processing Plant. This limit applies to all of the emission episodes listed in the operating requirements section of this permit.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements
A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only loadout materials for the EC12, Building 37 (B37), 4L, and SF processing lines; materials for or from the production of products co-produced in the 4L or SF and EC44 processing lines (4L/SF/EC44); and for packaging and bulk terminal operations in the Building 11 (B11) Product Tanker Loadout (EU-B11-LO) and Product Packaging and Mini-bulk Loadout (EU-B11-Packaging).
   (1) For all materials transferred in emission units EU-B11-LO and EU-B11-Packaging, the owner or operator shall record and document the loadout used, the VOC-containing material transferred, the origins of the VOC-containing material (i.e. EC12, B37, 4L, SF, or 4L/SF/EC44 processing lines; or packaging and bulk terminal operations), and amount of VOC-containing material transferred.
   (2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC-containing material transferred in emission units EU-B11-LO and EU-B11-Packaging.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

Recordkeeping for the 4L and SF VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission limit cap (25.0 tpy) in the emission limit section of this
permit. These requirements pertain to the following emission episodes for the production of products made in the 4L and South Flowable (SF) processing lines:

Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Bulk Storage Tank Emissions
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

D. The facility shall document each product produced in the 4L or SF processing line. The facility shall also document whether the product is produced alone in the 4L or SF processing line or co-produced with the EC44.

E. For each product produced in the 4L or SF processing line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition E.5. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
   (5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.
a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.
(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

F. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.
   (1) The permittee shall use the operating scenarios required in Condition E.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

G. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
   (2) The daily number of standard or nonstandard batches completed for each product produced.

H. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

I. If the 12-month rolling total of the VOC emissions exceeds 19.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 19.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 19.0 tons, daily recordkeeping will be required per this section of this permit.
Recordkeeping for the 4L or SF and EC44 VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission (21.0 tpy) limit cap in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products co-produced in the 4L or SF and EC44 processing lines:

Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Bulk Storage Tank Emissions
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

J. The facility shall document each product produced in the EC44 processing line. The facility shall also document whether the product is produced in the EC44 processing line or co-produced with the 4L or SF processing lines.

K. For each product co-produced in the EC44 processing line with the 4L or SF processing lines, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition K.5. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in §63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.
The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

L. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.
   (1) The permittee shall use the operating scenarios required in Condition K.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

M. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
   (2) The daily number of standard or nonstandard batches completed for each product produced.

N. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

O. If the 12-month rolling total of the VOC emissions exceeds 17.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.
Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 17.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 17.0 tons, daily recordkeeping will be required per this section of this permit.

**Recordkeeping for the Building 37 Processing Plant VOC Emission Cap**

The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in the emission limit section of this permit for the Building 37 Processing Plant. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points 37-1, 37-2, 37-3, and 37-4; those listed in the permits for Building 37 – Interior VOC Emissions, as well as those from miscellaneous sources related to B37 production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The limit also covers VOC emissions from storing materials from B37 in the storage tanks in buildings B11, B39 and B42, and packaging and loadout in buildings B11, B14, B39 and B42. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the Building 37 Processing Plant:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Storage Tanks
- Gas Sweep
- Solids Handling
- Evaporation from Screens and Open Tanks
- Heating
- Ancillary Packaging Emissions - Ink Jet & Stenciling
- Laboratory Emissions
- Tank Cleaning Emissions
- Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

**P.** For each product produced in the Building 37 Processing Plant, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product produced.
(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition P.5. The facility shall document and provide a justification for the value for each input used.
(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

h. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

i. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

j. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

k. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

l. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

m. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.
n. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

Q. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition P.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

R. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
(2) The daily number of standard or nonstandard batches completed for each product produced.

S. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

T. If the 12-month rolling total of the VOC emissions exceeds 13.5 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 13.5 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 13.5 tons, daily recordkeeping will be required per this section of this permit.

Conditions for product loadout for the packaging and bulk terminal operations

U. Packaging and bulk terminal operations shall include receiving, storing, processing, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. 4L, South Flowable, EC12, B37, etc.). These materials are brought to the facility, stored, processed, and then packaged in containers or drums or loaded into tankers or railcars and transferred off site.

V. The owner or operator shall only loadout materials from the bulk terminal operations (see definition in Condition 5.F) in emission points EP-B15-LO-1, EP-B15-LO-2, and EP-B15-Hose.
(1) For all materials transferred in the Building 15 Loadouts, the owner or operator shall record and document:
   a) the loadout used;
   b) the amount of VOC-containing material transferred;
   c) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
   d) if the material is an organic liquid, as defined in §63.2406

W. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations loaded out (transferred) in the B11 Product Tanker Loadout (EU-B11-LO) and the Product Packaging and Mini-bulk Loadout (EU-B11-Packaging) and Building 15 (B15) shall be less than 10.0 psia · lb/lb · mol.
(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations transferred in emission units EU-B11-LO and EU-B11-Packaging and Building 15 (B15).
Conditions for product loadout for the EC12 processing line

X. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the EC12 processing line loaded out (transferred) in the B11 Product Tanker Loadout (EU-B11-LO) and the Product Packaging and Mini-bulk Loadout (EU-B11-Packaging) shall be less than 10.0 psia \( \cdot \) lb/lb \( \cdot \) mol.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations transferred in emission units EU-B11-LO and EU-B11-Packaging.

NSPS or NESHAP Requirements

Y. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

Z. The owner or operator shall determine and document which transfer racks covered under this permit are subject to 40 CFR Part 63 Subpart FFFF, and, if subject, which miscellaneous organic chemical process unit (MCPU) the transfer rack is assigned, using the procedures in §63.2435 (d), if applicable.

AA. The facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of a miscellaneous organic chemical process unit, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the group status for the transfer racks that are part of a miscellaneous organic chemical process unit, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

BB. For each loadout covered under this permit, the owner or operator shall determine and document if the loadout is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

CC. The facility shall analyze all changes in the material transferred, process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the loadouts in B15.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.
DD. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

EE. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the loadouts in B11.
(2) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 17-A-178-S2

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 17-A-178-S2
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)'cf'

Monitoring Requirements

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Building 11 Storage Tanks

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B11TF-1</td>
<td>TK1</td>
<td>Building 11 Storage Tank 1</td>
<td>37,500 gallons</td>
<td>None</td>
<td>17-A-179-S1</td>
</tr>
<tr>
<td>EP-B11TF-2</td>
<td>TK2</td>
<td>Building 11 Storage Tank 2</td>
<td>37,500 gallons</td>
<td>None</td>
<td>17-A-180-S1</td>
</tr>
<tr>
<td>EP-B11TF-3</td>
<td>TK3</td>
<td>Building 11 Storage Tank 3</td>
<td>37,500 gallons</td>
<td>None</td>
<td>17-A-181-S1</td>
</tr>
<tr>
<td>EP-B11TF-4</td>
<td>TK4</td>
<td>Building 11 Storage Tank 4</td>
<td>37,500 gallons</td>
<td>None</td>
<td>17-A-182-S1</td>
</tr>
<tr>
<td>EP-B11TF-5</td>
<td>TK5</td>
<td>Building 11 Storage Tank 5</td>
<td>37,500 gallons</td>
<td>None</td>
<td>17-A-183-S1</td>
</tr>
<tr>
<td>EP-B11TF-6</td>
<td>TK6</td>
<td>Building 11 Storage Tank 6</td>
<td>37,500 gallons</td>
<td>None</td>
<td>17-A-184-S1</td>
</tr>
<tr>
<td>EP-B11TF-7</td>
<td>TK7</td>
<td>Building 11 Storage Tank 7</td>
<td>37,500 gallons</td>
<td>None</td>
<td>17-A-185-S1</td>
</tr>
<tr>
<td>EP-B11TF-8</td>
<td>TK8</td>
<td>Building 11 Storage Tank 8</td>
<td>17,500 gallons</td>
<td>None</td>
<td>17-A-186-S1</td>
</tr>
<tr>
<td>EP-B11TF-9</td>
<td>TK9</td>
<td>Building 11 Storage Tank 9</td>
<td>17,500 gallons</td>
<td>None</td>
<td>17-A-187-S1</td>
</tr>
<tr>
<td>EP-B11TF-10</td>
<td>TK10</td>
<td>Building 11 Storage Tank 10</td>
<td>4,000 gallons</td>
<td>None</td>
<td>17-A-188-S1</td>
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<tr>
<td>EP-B11TF-11</td>
<td>TK11</td>
<td>Building 11 Storage Tank 11</td>
<td>4,000 gallons</td>
<td>None</td>
<td>17-A-189-S1</td>
</tr>
<tr>
<td>EP-B11TF-12</td>
<td>TK12</td>
<td>Building 11 Storage Tank 12</td>
<td>4,000 gallons</td>
<td>None</td>
<td>17-A-190-S1</td>
</tr>
<tr>
<td>EP-B11TF-13</td>
<td>TK13</td>
<td>Building 11 Storage Tank 13</td>
<td>4,000 gallons</td>
<td>None</td>
<td>17-A-191-S1</td>
</tr>
<tr>
<td>EP-B11TF-14</td>
<td>TK14</td>
<td>Building 11 Storage Tank 14</td>
<td>4,000 gallons</td>
<td>None</td>
<td>17-A-192-S1</td>
</tr>
<tr>
<td>EP-B11TF-15</td>
<td>TK15</td>
<td>Building 11 Storage Tank 15</td>
<td>4,000 gallons</td>
<td>None</td>
<td>17-A-193-S1</td>
</tr>
<tr>
<td>EP- B11TF-16</td>
<td>TK16</td>
<td>Building 11 Storage Tank 16</td>
<td>4,000 gallons</td>
<td>None</td>
<td>17-A-194-S1</td>
</tr>
<tr>
<td>EP- B11TF-17</td>
<td>TK17</td>
<td>Building 11 Storage Tank 17</td>
<td>4,000 gallons</td>
<td>None</td>
<td>17-A-195-S1</td>
</tr>
<tr>
<td>EP- B11TF-122</td>
<td>TK122</td>
<td>Building 11 Storage Tank 122</td>
<td>6,000 gallons</td>
<td>None</td>
<td>17-A-196-S1</td>
</tr>
<tr>
<td>EP- B11TF-123</td>
<td>TK123</td>
<td>Building 11 Storage Tank 123</td>
<td>6,000 gallons</td>
<td>None</td>
<td>17-A-197-S1</td>
</tr>
<tr>
<td>EP- B11TF-124</td>
<td>TK124</td>
<td>Building 11 Storage Tank 124</td>
<td>6,000 gallons</td>
<td>None</td>
<td>17-A-198-S1</td>
</tr>
<tr>
<td>EP- B11TF-125</td>
<td>TK125</td>
<td>Building 11 Storage Tank 125</td>
<td>6,000 gallons</td>
<td>None</td>
<td>17-A-199-S1</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

<table>
<thead>
<tr>
<th>Pollutant: Volatile Organic Compounds (VOC)</th>
<th>Emission Limit(s): 25 tons/yr (1)</th>
<th>Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Emission limits apply to the 4L and South Flowable (SF) processing lines. This limit applies to the following emission points: EP4L–BH1(i), EPSF –BH1(i), EPSF –BH2(i), EPSF –Vent1(i), EP-B17TF-East(ii), EP-B17TF-West(ii), EPB17-LO(ii), EPB11-LO(ii), EP-B13TF-1(ii), EPB13-LO(ii), and those covered under the 4L Process Line CAP permit(ii) and the Building 11 Storage Tanks CAP permit(ii). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L and South Flowable (SF) processing lines.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii. The VOC emission limit only applies to emissions from equipment associated with the production of products produced in the 4L and SF processing lines. This limit does not apply when the equipment is handling materials for the co-production of products in the 4L or SF and EC44 processing lines.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv. The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the 4L and South Flowable (SF) processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pollutant: Volatile Organic Compounds (VOC)</th>
<th>Emission Limit(s): 21 tons/yr (2)</th>
<th>Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Emission limits apply to the production of products co-produced in the 4L or SF and EC44 processing lines. This limit applies to the following emission points when products are co-produced in the 4L or SF and EC44 processing lines: EP-EC44(ii), EP4L–BH1(ii), EPSF –BH1(ii), EPSF –BH2(ii), EPSF –Vent1(ii), EP-B17TF-East(ii), EP-B17TF-West(ii), EPB17-LO(ii), EPB11-LO(ii), EP-B13TF-1(ii), EPB13-LO(ii), and those</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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covered under the 4L Process Line CAP permit\(^{(i)}\) and the Building 11 Storage Tanks CAP permit\(^{(ii)}\). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L or SF and EC44 co-production processing line.

iii) The VOC emission limit only applies to emissions from equipment associated with the production of products co-produced in the 4L or SF and EC44 processing lines for emission point EP-EC44. This limit does not apply when the equipment is handling materials for the production of products not co-produced in the 4L or SF and EC44 processing lines.

iv) The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the production of products co-produced in the 4L or SF and EC44 processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 17 tons/yr \(^{(3)}\)
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

\(^{(3)}\) Emission limits apply to B37 Processing Plant. This limit applies to all of the emission episodes listed in operating limit section of this permit.

### Operational Limits & Requirements

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

#### General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.

   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only store materials for the EC12, Building 37 (B37), 4L, and SF processing lines; materials for or from the production of products co-produced in the 4L or SF and EC44 processing lines (4L/SF/EC44); and for packaging and bulk terminal operations in the tanks in the Building 11 (B11) tank farm.

   (1) For all materials stored in the tanks in the Building 11 (B11) tank farm, the owner or operator shall record and document the tank used, the material stored, the origins of the material (i.e. EC12, B37, 4L, SF, and 4L/SF/EC44 processing lines; and packaging and bulk terminal operations) and amount of VOC-containing material stored.

   (2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the tanks in the B11 tank farm.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
Recordkeeping for the 4L and SF VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission limit cap (25.0 tpy) in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products made in the 4L and South Flowable (SF) processing lines:

Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Bulk Storage Tank Emissions
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

D. The facility shall document each product produced in the 4L or SF processing line. The facility shall also document whether the product is produced alone in the 4L or SF processing line or co-produced with the EC44.

E. For each product produced in the 4L or SF processing line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition D.5. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
   (5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission
factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.
(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

F. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition D.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

G. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
(2) The daily number of standard or nonstandard batches completed for each product produced.

H. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

I. If the 12-month rolling total of the VOC emissions exceeds 19.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 19.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 19.0 tons, daily recordkeeping will be required per this section of this permit.

Recordkeeping for the 4L or SF and EC44 VOC Emission Cap
The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission (21.0 tpy) limit cap in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products co-produced in the 4L or SF and EC44 processing lines:

Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Bulk Storage Tank Emissions
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

J. The facility shall document each product produced in the EC44 processing line. The facility shall also document whether the product is produced in the EC44 processing line or co-produced with the 4L or SF processing lines.

K. For each product co-produced in the EC44 processing line with the 4L or SF processing lines, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product produced.
(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures,
vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in
the equations listed below in Condition J.5. The facility shall document and provide a
justification for the value for each input used.

(4) The permittee shall identify and record each type of emission unit used and the
associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251)
for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each
emission episode (tons/batch). The emission rates for each emission episode shall be
based on emission factors or emission estimation method developed by the permittee
according to the guidelines given below. The permittee’s calculation of each emission
factor or emission estimation method shall be subject to the review and approval of
the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct
emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the
production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor
Displacement, Process Tank Cleaning, and Packaging the appropriate equations
and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or
Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2,
Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other
Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods
for Estimating Air Emissions from Chemical Manufacturing Facilities, Section
3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage
tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate
equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant
Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods
provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission
Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8,
Methods for Estimating Air Emissions from Paint, Ink, and Other Coating
Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for
Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2
shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided
in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2,
Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other
Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16,
Methods for Estimating Air Emissions from Chemical Manufacturing Facilities,
Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty
vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63,
Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

L. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition J.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

M. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.

N. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

O. If the 12-month rolling total of the VOC emissions exceeds 17.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 17.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 17.0 tons, daily recordkeeping will be required per this section of this permit.

Recordkeeping for the Building 37 Processing Plant VOC Emission Cap
The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in the emission limit section of this permit for the Building 37 Processing Plant. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points 37-1, 37-2, 37-3, and 37-4; those listed in the permits for Building 37 – Interior VOC Emissions, as well as those from miscellaneous sources related to B37 production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The limit also covers VOC emissions from storing materials from B37 in the storage tanks in buildings B11, B39 and B42, and packaging and loadout in buildings B11, B14, B39 and B42. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the Building 37 Processing Plant:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions
The facility must keep the following records to show compliance with the VOC emission limit cap:

P. For each product produced in the Building 37 Processing Plant, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product produced.
(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition O.5. The facility shall document and provide a justification for the value for each input used.
(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for
Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

Q. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition O.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

R. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.
S. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

T. If the 12-month rolling total of the VOC emissions exceeds 13.5 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 13.5 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 13.5 tons, daily recordkeeping will be required per this section of this permit.

Conditions for storing materials for the packaging and bulk terminal operations

U. Packaging and bulk terminal operations shall include receiving, storing, processing, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. 4L, South Flowable, EC12, B37, etc.). These materials are brought to the facility, stored, processed, and then packaged (containers, drums) or loaded into tankers or railcars and transferred to another process or off site.

V. The amount of VOC-containing material for the packaging and bulk terminal operations that is stored in the tanks in B11 tank farm shall not exceed 175.0 Million Gallons per rolling twelve-month period.

(1) The permittee shall maintain the following monthly records for all VOC-containing material for the packaging and bulk terminal operations that is stored in the tanks in B11 tank farm:
a) The identification and origins of each VOC-containing material;
b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
c) the amount of VOC-containing material stored;
d) the twelve month total rolling total of VOC-containing material process stored.

W. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations that is stored in the tanks in B11 tank farm shall be less than 10.0 psia \( \cdot \) lb/lb \( \cdot \) mol.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations stored in the tanks in B11 tank farm.

Conditions for storing materials for the EC12 processing line

X. The amount of VOC-containing material from or for the EC12 processing line that is stored in the tanks in B11 tank farm shall not exceed 25.0 Million Gallons per rolling twelve-month period.

(1) The permittee shall maintain the following monthly records for all VOC-containing material from or for the EC12 process that is stored in the tanks in B11 tank farm:
   a) The identification and origins of each VOC-containing material;
   b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
   c) the amount of VOC-containing material stored;
   d) the twelve month total rolling total of VOC-containing material stored.

Y. The product of the true vapor pressure and the molecular weight of each VOC-containing material from or for the EC12 process that is stored in the tanks in B11 tank farm shall be less than 10.0 psia \( \cdot \) lb/lb \( \cdot \) mol.

(2) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material from or for the EC12 process stored in the tanks in B11 tank farm.

NSPS or NESHAP Requirements

Z. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL), as defined in 40 CFR Part 51.100, stored in the bulk storage tanks in B11 shall be less than 15.0 kPa.

(1) The facility shall keep readily accessible records showing the dimensions and capacity for the bulk storage tanks in B11.

(2) The facility shall document the maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL) stored in the bulk storage tanks in B11.

(3) The facility shall notify the Administrator within 30 days if the maximum true vapor pressure of the liquids stored in the bulk storage tanks in B11 exceeds 15.0 kPa.
AA. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(2) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

BB. The owner or operator shall determine and document which storage tanks covered under this permit is subject to 40 CFR Part 63 Subpart FFFF, and, if subject, to which miscellaneous organic chemical process unit (MCPU) the tank is assigned, using the procedures in § 63.2435 (d), if applicable.

CC. The material stored in the bulk storage tanks in B11 that are part of a miscellaneous organic chemical process unit, and with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(3) The owner or operator shall determine and document the maximum true vapor pressure and the group status for the storage tanks that are part of a miscellaneous organic chemical process unit for the B11 Tank Farm, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

DD. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

EE. The facility shall analyze all changes in material stored in any applicable storage tank and determine if there is a change in applicability for any NSPS or NESHAP subparts.

(1) The facility shall document all changes in the contents of the tanks or process or formulations changes to any tank that is part of a MCPU and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permits listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits listed in Table: Associated Equipment

40 CFR 63 Subpart FFFF

567 IAC 23.1(4) "cf"
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: B12-EL

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): B12-EL

Emission Unit vented through this Emission Point: B12-EL
Emission Unit Description: Equipment Leaks for the B12 Packaging Line
Raw Material/Fuel: Herbicide
Rated Capacity: N/A

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permit 17-A-705-S1

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements
A. All process equipment for the B12 Packaging Line shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (2) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

C. The permittee shall retain the Safety Data Sheet (SDS) for all VOC containing materials used in the emission units covered under this permit.

D. The equipment used in the B12 Packaging Line shall have a maximum of 243 heavy liquid valves, 50 heavy liquid pumps, 1358 connectors, and 26 heavy liquid sample connections. The process shall not use any light liquid components, gas valves,
compressors, agitators, open-ended lines, or pressure relief valves. This shall include all of the equipment used in the B12 Packaging Line to handle any VOC-containing material.

(2) The owner or operator shall count and document the number and types of components used in the B12 Packaging Line. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(3) The company shall modify the component count whenever the number of components change.

E. The equipment used in the B12 Packaging Line for the EC17 Processing Line shall have a maximum of 120 heavy liquid valves, 22 heavy liquid pump, 360 heavy liquid connectors, and 2 heavy liquid sample connections. The process shall not use any light liquid components, gas valves, compressors, agitators, open-ended lines, or pressure relief valves. This shall include all of the equipment used in B13 for the EC17 Processing Line.

(3) The owner or operator shall count and document the number and types of components used in the B12 Packaging Line for the EC17 Processing Line. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(4) The company shall modify the component count whenever the number of components change.

NSPS and NESHAP Requirements

A. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(4) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

B. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in in the referenced subparts F, H, or UU.

(2) The permittee shall document the subpart they are complying with, and meet all of the applicable requirements as specified in in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the
permittee is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1019 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the permittee shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed.

C. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in the B12 Packaging Line.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 17-A-705-S1

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 17-A-705-S1
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)”cf"

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: B12 Packaging Reservoir and Line

Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
<th>Raw Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B12-PR1</td>
<td>EUB12-PR1</td>
<td>B12 Packing Reservoir</td>
<td>34 gallons</td>
<td>None</td>
<td>17-A-703-S1</td>
<td>Herbicide</td>
</tr>
<tr>
<td>EP-B12-PL1</td>
<td>EU-B12-P1</td>
<td>B12 Packaging Line</td>
<td>63,360 gallons/hr</td>
<td>None</td>
<td>17-A-704-S1</td>
<td>Herbicide</td>
</tr>
</tbody>
</table>

Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 10 tons/yr\(^{(1)}\), 22 tons/yr\(^{(2)}\)

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

(1) Emission limits apply to B12 Packing Reservoir and Packaging Line. This limit applies to all of the emission episodes listed in operational limits section of this permit for all products packaged on the B12 Packaging Line.

(2) Emission limits apply to EC17 Processing Line. This limit applies to all of the emission units and emission episodes for the EC17 Processing Line listed in operational limits section of this permit.

**Operational Limits & Requirements**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**
A. All process equipment for the B12 Packaging Line shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (3) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
C. The permittee shall retain Material Safety Data Sheets (MSDS) for all VOC containing materials used in the emission units covered under this permit.

D. The permittee shall package a maximum of 22 million gallons of material in the B12 Packaging Line per rolling 12-month period.
   (1) The owner or operator shall record on a monthly basis; the amount of material packaged at the facility, in gallons, and calculate and record rolling 12-month totals.

E. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 17-397) the owner or operator shall document and maintain a record of the following:
   (1) A description of the project (Project Number 17-397),
   (2) Identification of the emission unit(s) whose emissions of VOC could be affected by the project (Project Number 17-397), and
   (3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "projected actual emissions" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.

F. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall:
   (1) Monitor VOC emissions that could increase as a result of the project that is emitted by any emissions units identified in Condition E.(2).
   (2) Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.

G. Per 567 IAC 33.3(18)"f"(5), the owner or operator shall retain a written record containing the information required in Condition F. of this permit for a period of ten (10) years after the project (Project Number 17-397) is completed.

H. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 22.107(6).

Recordkeeping for the B12 Packaging Line VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission limit cap (10.0 tpy) in the emission limit section of this permit. These requirements pertain to the following emission episodes for the packaging of products done in the B12 Packaging Line:
Displacement and Packaging
The VOC emission limit covers all of the emissions from the emission units and emission episodes in this document.

I. The facility shall document each product packaged in the B12 Packaging Line. This shall include the product name and which production line it was produced in, if applicable.

J. For each product packaged in the B12 Packaging Line, that contains a VOC-containing material, the permittee shall determine and record the following information:

(1) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each product.

(2) The permittee shall calculate and record the VOC emission rate (tons per gallon) for each emission episode based on the material used. The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.
   a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

(3) For each product, the facility shall calculate and document the total VOC emission rate (tons per gallon) by summing the emission rate of each emission episode.

K. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material packaged; as required to calculate the VOC emissions for the emission limit cap.
(2) The amount of each product packaged, in gallons.
L. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The amount of each product packaged, in gallons.
(2) The total amount of VOC emissions for each product packaged, in gallons.
(3) The total amount of VOC emissions for all products packaged, in gallons.
(4) The 12-month rolling total of the amount of VOC emissions from all products packaged, in gallons.

M. If the 12-month rolling total of the VOC emissions exceeds 7.5.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit., the permittee shall immediately begin keeping the following daily records:

(1) The amount of each product packaged, in gallons.
(2) The total amount of VOC emissions for each product packaged, in gallons.
(3) The total amount of VOC emissions for all products packaged, in gallons.
(4) The 365-day rolling total of the amount of VOC emissions from all products packaged, in gallons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 7.5 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 7.5 tons, daily recordkeeping will be required per this section of this permit.

Recordkeeping for the EC17 Processing Line VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in Condition 1 of this permit for the EC17 Processing Line. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points EC17-1 and EC17-2 and the EC17 Packaging Line as well as those from miscellaneous sources related to EC17 Processing Line production, including emissions from drum heating, ancillary packaging emissions, laboratory activity, and tank and floor cleaning. The limit also covers emissions from the B12 Packaging Line and Tank TK-22 in building B13 when processing materials from the EC17 Processing Line. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the EC17 Processing Line:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation
Heating
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

N. For each product produced in the EC17 Processing Line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition 5.O. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
   (5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.
   a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used.
   b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or more recent) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).
   c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG).
   d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other
Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

O. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition 5.O above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

P. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in Condition 1 of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard and nonstandard batches completed for each product produced.

Q. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in Condition 1 of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

R. If the 12-month rolling total of the VOC emissions exceeds 18.0 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in Section 1 of this permit, the permittee shall immediately begin keeping the following daily records:
(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in Condition 1 of this permit drops below 18.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 18.0 tons, daily recordkeeping will be required per this section of this permit.

**NSPS or NESHAP Requirements**
S. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
(3) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☑
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☑
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☑

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: B13-EL

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): B13-EL

Emission Unit vented through this Emission Point: B13-EL
Emission Unit Description: Building 13 Equipment Leaks
Raw Material/Fuel: Herbicide
Rated Capacity: N/A

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permit 17-A-203-S2

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials handled in the Building 13 (B13) equipment, the owner or operator shall record and document the material handled and the origins of the material (i.e. EC12, 4L, SF, NF, 4L/SF/EC44 or EC17 processing lines; or bulk terminal operations).
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials handled in the B13 equipment.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall
be initiated promptly upon discovery.

D. The equipment used in the B13 tank farm and the associated loadouts shall have a maximum of 190 heavy liquid valves, 22 heavy liquid pumps, 1474 heavy liquid connectors, and 22 heavy liquid sample connections. The process shall not use any light liquid components, gas valves, compressors, agitators, open-ended lines, or pressure relief valves. This shall include all of the equipment used in the B13 tank farm and the associated loadouts to handle any VOC-containing material.

(1) The owner or operator shall count and document the number and types of components used in B13. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are “light liquid” or “heavy liquid” components. The terms “light liquid” and “heavy liquid” shall have the same definitions as “in light liquid service” and “in heavy liquid service” found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

Operating Limits and Recordkeeping Requirements for Equipment Used for the 4L and SF processing lines

E. The equipment used in B13 for the 4L and South Flowable (SF) processing lines shall have a maximum of 39 heavy liquid valves, 4 heavy liquid pumps, 329 connectors, and 4 heavy liquid sample connections. The process shall not use any light liquid components, gas valves, compressors, agitators, open-ended lines, or pressure relief valves. This shall include all of the equipment used in B13 for the 4L and SF processing lines.

(1) The owner or operator shall count and document the number and types of components used in B13 for the 4L and SF processing lines. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are “light liquid” or “heavy liquid” components. The terms “light liquid” and “heavy liquid” shall have the same definitions as “in light liquid service” and “in heavy liquid service” found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

Operating Limits and Recordkeeping Requirements for Equipment Used for the 4L or SF and EC44 processing lines

F. The equipment used in B13 for the production of products co-produced in the 4L or SF and EC44 processing lines shall have a maximum of 39 heavy liquid valves, 4 heavy liquid pumps, 329 connectors, and 4 heavy liquid sample connections. The process shall not use any light liquid components, gas valves, compressors, agitators, open-ended lines,
or pressure relief valves. This shall include all of the equipment used in B13 for the 4L and SF processing lines.

(1) The owner or operator shall count and document the number and types of components used in B13 for the production of products co-produced in the 4L or SF and EC44 processing lines. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are “light liquid” or “heavy liquid” components. The terms “light liquid” and “heavy liquid” shall have the same definitions as “in light liquid service” and “in heavy liquid service” found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

Operating Limits and Recordkeeping Requirements for Equipment Used for the North Flowable Liquids Plant

G. The equipment used in B13 for the North Flowable Liquid Plant shall have a maximum of 12 liquid valves, 2 liquid pumps, and 76 connectors. The process shall not use any gas valves, compressors, open-ended lines, sample connections, agitators, or pressure relief valves. This shall include all of the equipment used in B13 for the North Flowable Liquid Plant.

H. The maximum HAP content of any material used in the equipment for the North Flowable Liquids Plant in B13 that is in light liquid service shall be 65.0%, by weight.

I. The maximum methanol content of any material used in the equipment for the North Flowable Liquids Plant in B13 shall be 13.0%, by weight.

J. The maximum triethylamine content of any material used in the equipment for the North Flowable Liquids Plant in B13 shall be 13.0%, by weight.

K. The facility shall identify and document each component used in B13 for the North Flowable Liquids Plant. Components include, but are not limited to, valves, pumps, connectors, compressor seals, pressure relief valves, open-ended lines, sample connections, agitators, etc. For each component, the facility shall document:

(1) The type of component (liquid valve, liquid pump, etc.). The type must also include whether the components are “light liquid” or “heavy liquid” components. The terms “light liquid” and “heavy liquid” shall have the same definitions as “in light liquid service” and “in heavy liquid service” found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures;

(2) the percent by weight HAP, for all light liquids used in the equipment for the North
Flowable Liquids Plant in B13;
(3) the percent by weight methanol for all liquids used in the equipment for the North Flowable Liquids Plant in B13;
(4) the percent by weight triethylamine for all liquids used in the equipment for the North Flowable Liquids Plant in B13.

L. The facility shall document the total number of each type of component (liquid valve, liquid pump, etc.) used in the North Flowable Liquid Plant in B13.

M. The company shall modify the component lists in Condition 5.K whenever changes are made to the materials or equipment used in B13 for the North Flowable Liquid Plant.

Operating Limits and Recordkeeping Requirements for Equipment Used for the EC17 Processing Line

N. The equipment used in B13 for the EC17 Processing Line shall have a maximum of 12 heavy liquid valves, 1 heavy liquid pump, 112 heavy liquid connectors, and 3 heavy liquid sample connections. The process shall not use any light liquid components, gas valves, compressors, agitators, open-ended lines, or pressure relief valves. This shall include all of the equipment used in B13 for the EC17 Processing Line.

(1) The owner or operator shall count and document the number and types of components used in B13 for the EC17 Processing Plant. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are “light liquid” or “heavy liquid” components. The terms “light liquid” and “heavy liquid” shall have the same definitions as “in light liquid service” and “in heavy liquid service” found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

NSPS and NESHAP Requirements

O. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

P. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in the referenced subparts F, H, or UU.

(1) The permittee shall document the subpart they are complying with, and meet all of the applicable requirements as specified in the referenced subpart, including the
record keeping and reporting requirements. At the time of permit issuance, the permittee is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1019 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the permittee shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed.

Q. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in B13.
(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement:  DNR Construction Permit 17-A-203-S2

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:  DNR Construction Permit 17-A-203-S2
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?  Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required?  Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required?  Yes ☐ No ☒

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Number: B13-TF

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): B13-TF

Emission Unit vented through this Emission Point: B13-TF
Emission Unit Description: Building 13 Storage Tanks
Raw Material/Fuel: Herbicide
Rated Capacity: 20,000 Gallons

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 25 tons/yr (1)
Authority for Requirement: DNR Construction Permit 17-A-202-S2
(1) Emission limits apply to the 4L and South Flowable (SF) processing lines. This limit applies to the following emission points: EP4L-BH1(i), EPSF -BH1(i), EPSF –BH2(i), EPSF –Vent1(i), EP-B17TF-East(ii), EP-B17TF-West(ii), EPB17-LO(ii), EPB11-LO(ii), EP-B13TF-1(ii), EPB13-LO(ii), and those covered under the 4L Process Line CAP permit(i) and the Building 11 Storage Tanks CAP permit(ii). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L and South Flowable (SF) processing lines.

i. The VOC emission limit only applies to emissions from equipment associated with the production of products produced in the 4L and SF processing lines. This limit does not apply when the equipment is handling materials for the co-production of products in the 4L or SF and EC44 processing lines.

ii. The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the 4L and South Flowable (SF) processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 21 tons/yr (2)
Authority for Requirement: DNR Construction Permit 17-A-202-S2
(2) Emission limits apply to the production of products co-produced in the 4L or SF and EC44 processing lines. This limit applies to the following emission points when products are co-produced in the 4L or SF and EC44 processing lines: EP-EC44(ii), EP4L-BH1(i), EPSF –BH1(i), EPSF –BH2(i), EPSF –Vent1(i), EP-B17TF-East(ii), EP-B17TF-West(ii), EPB17-LO(ii), EPB11-LO(ii), EP-B13TF-1(ii), EPB13-LO(ii), and those covered under the 4L Process Line CAP permit(i) and the Building 11 Storage Tanks CAP permit(ii). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L or SF and EC44 co-production processing line.

i. The VOC emission limit only applies to emissions from equipment associated with the production of products co-produced in the 4L or SF and EC44 processing lines for emission point EP-EC44. This limit does not apply when the equipment is handling materials for the production of products not co-produced in the 4L or SF and EC44 processing lines.

ii. The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the production of products co-produced in the 4L or SF and EC44 processing lines.
processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 17 tons/yr \(^{(3)}\)

Authority for Requirement: DNR Construction Permit 17-A-202-S2

\(^{(3)}\) Emission limits apply to the EC17 Processing Line. This limit applies to all of the emission units and emission episodes for the EC17 Processing Line listed in operational limits section of this permit.

**Operational Limits & Requirements**

_The owner/operator of this equipment shall comply with the operational limits and requirements listed below._

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only store materials for the EC12, 4L, South Flowable (SF), North Flowable (NF), and EC17 processing lines; materials for or from the production of products co-produced in the 4L or SF and EC44 processing lines (4L/SF/EC44); and for bulk terminal operations in the Building 13 (B13) storage tanks.
   (1) For all materials stored in the tanks in the Building 13 (B13) storage tanks, the owner or operator shall record and document the tank used, the material stored, the origins of the material (i.e. EC12, 4L, SF, NF, 4L/SF/EC44 or EC17 processing lines; or bulk terminal operations) and amount of VOC-containing material stored.
   (2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the B13 storage tanks.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

**Recordkeeping for the 4L and SF VOC Emission Cap**

The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission limit cap (25.0 tpy) in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products made in the 4L and South Flowable (SF) processing lines:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Gas Sweep
- Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Bulk Storage Tank Emissions
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

D. The facility shall document each product produced in the 4L or SF processing line. The facility shall also document whether the product is produced alone in the 4L or SF processing line or co-produced with the EC44.

E. For each product produced in the 4L or SF processing line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition 5.E. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
   (5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.
      a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other
Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in §63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

F. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.
(1) The permittee shall use the operating scenarios required in Condition 5.E above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

G. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
   (2) The daily number of standard or nonstandard batches completed for each product produced.

H. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

I. If the 12-month rolling total of the VOC emissions exceeds 19.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 19.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions again exceed 19.0 tons, daily recordkeeping will be required per this section of this permit.

**Recordkeeping for the 4L or SF and EC44 VOC Emission Cap**

The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission (21.0 tpy) limit cap in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products co-produced in the 4L or SF and EC44 processing lines:
Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Bulk Storage Tank Emissions
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

J. The facility shall document each product produced in the EC44 processing line. The facility shall also document whether the product is produced in the EC44 processing line or co-produced with the 4L or SF processing lines.

K. For each product co-produced in the EC44 processing line with the 4L or SF processing lines, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition 5.K. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
   (5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.
a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.
(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

L. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.
   (1) The permittee shall use the operating scenarios required in Condition 5.K above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

M. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
   (2) The daily number of standard or nonstandard batches completed for each product produced.

N. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

O. If the 12-month rolling total of the VOC emissions exceeds 17.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 17.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily
calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 17.0 tons, daily recordkeeping will be required per this section of this permit.

**Recordkeeping for the EC17 Processing Line VOC Emission Cap**

The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in Condition 1 of this permit for the EC17 Processing Line. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points EC17-1 and EC17-2 and the EC17 Packaging Line as well as those from miscellaneous sources related to EC17 Processing Line production, including emissions from drum heating, ancillary packaging emissions, laboratory activity, and tank and floor cleaning. The limit also covers emissions from the B12 Packaging Line and Tank TK-22 in building B13 when processing materials from the EC17 Processing Line. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the EC17 Processing Line:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Storage Tanks
- Gas Sweep
- Solids Handling
- Evaporation
- Heating
- Ancillary Packaging Emissions - Ink Jet & Stenciling
- Laboratory Emissions
- Tank Cleaning Emissions
- Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

P. For each product produced in the EC17 Processing Line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product produced.

(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.

(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition P.5. The facility shall document and provide a justification for the value for each input used.

(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be
based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or more recent) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG).

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.
Q. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.
   (1) The permittee shall use the operating scenarios required in Condition P.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

R. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in Condition 1 of this permit:
   (1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
   (2) The daily number of standard and nonstandard batches completed for each product produced.

S. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in Condition 1 of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

T. If the 12-month rolling total of the VOC emissions exceeds 18.0 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit., the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in Condition 1 of this permit drops below 18.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 18.0 tons, daily recordkeeping will be required per this section of this permit.

NSPS or NESHAP Requirements
U. The tanks vented in the B13 tank farm shall not store liquids with a true vapor pressure of
greater than 15 kilopascals (kPa).
(1) For all material stored in the tanks in the B13 tank farm the owner or operator shall record and document the maximum true vapor pressure.

V. The owner or operator shall determine and document which storage tank covered under this permit is subject to 40 CFR Part 63 Subpart FFFF, and, if subject, to which miscellaneous organic chemical process unit (MCPU) the tank is assigned, using the procedures in § 63.2435 (d), if applicable.

W. The material stored in the storage tanks that are part of a miscellaneous organic chemical process unit with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.
(1) The owner or operator shall determine and document the group status for the storage tanks covered under this permit that are part of any miscellaneous organic chemical process unit, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

X. The facility shall analyze all changes in material stored in any applicable storage tank and determine if there is a change in applicability for any NSPS or NESHAP subparts.
(1) The facility shall document all changes in the contents of the tanks or process or formulations changes to any tank that is part of a MCPU and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for storing materials for the bulk terminal operations

Y. Bulk terminal operations shall include receiving, storing, processing, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. EC12, 4L, South Flowable (SF), 4L/SF/EC44, North Flowable (NF), and EC17 (EC W1 & ECW2), etc.). These materials are brought to the facility, stored, processed, and then loaded into tankers or railcars and transferred off site.

Z. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations that is stored in the tanks in B13 tank farm shall be less than 10.0 psia ∙ lb/lb ∙ mol.
(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations stored in the tanks in B13 tank farm.

Conditions for storing materials for the EC12 processing line

AA. The amount of VOC-containing material from or for EC12 process that is stored in the tanks in B13 tank farm shall not exceed 25.0 Million Gallons per rolling twelve-month period.
(1) The permittee shall maintain the following monthly records for all VOC-containing material from or for the EC12 process that is stored in the tanks in B13 tank farm:
   a) The identification and origins of each VOC-containing material;
   b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
c) the amount of VOC-containing material stored;
d) the twelve month total rolling total of VOC-containing material stored.

BB. The product of the true vapor pressure and the molecular weight of each VOC-containing material from or for the EC12 process that is stored in the tanks in B13 tank farm shall be less than 10.0 psia \cdot lb/lb \cdot mol.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material from or for the EC12 process stored in the tanks in B13 tank farm.

Conditions for storing materials for the North Flow (NF) processes

CC. The amount of VOC-containing material from or for NF process that is stored in the tanks in B13 tank farm shall not exceed 25.0 Million Gallons per rolling twelve-month period.

(1) The permittee shall maintain the following monthly records for all VOC-containing material from or for the NF process that is stored in the tanks in B13 tank farm:
   a) The identification and origins of each VOC-containing material;
   b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
   c) the amount of VOC-containing material stored;
   d) the twelve month total rolling total of VOC-containing material stored.

DD. The product of the true vapor pressure and the molecular weight of each VOC-containing material from or for the NF process that is stored in the tanks in B13 tank farm shall be less than 10.0 psia \cdot lb/lb \cdot mol.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material from or for the NF process stored in the tanks in B13 tank farm.

Authority for Requirement: DNR Construction Permit 17-A-202-S2

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 17-A-202-S2
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Emission Point Characteristics**  
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 6  
Stack Opening, (inches, dia.): 6  
Exhaust Flow Rate (scfm): Displacement  
Exhaust Temperature (°F): 70  
Discharge Style: Downward  
Authority for Requirement: DNR Construction Permit 17-A-202-S2  

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**  
*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒  
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒  
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒  

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number: Building 13 Truck and Hose Loadouts**

### Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B13-LO 13-1</td>
<td>EU-B13-LO 13-1</td>
<td>Building 13 Truck Loadout 1</td>
<td>400 gallons/min</td>
<td>None</td>
<td>17-A-201-S1</td>
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<td>EP- B13-LO 13-7</td>
<td>EU-B13-LO 13-7</td>
<td>Building 13 Hose Loadout 1</td>
<td>400 gallons/min</td>
<td>None</td>
<td>19-A-441</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb/hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 25 tons/yr (1)

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

(1) Emission limits apply to the 4L and South Flowable (SF) processing lines. This limit applies to the following emission points: EP4L-BH1(10), EPSF –BH1(10), EPSF –BH2(10), EPSF –Vent1(10), EP-B17TF-East(10), EP-B17TF-West(10), EPB17-LO(10), EPB11-LO(10), EP-B13TF-1(10), EPB13-LO(10), and those covered under the 4L Process Line CAP permit(11) and the Building 11 Storage Tanks CAP permit(11). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L and South Flowable (SF) processing lines.

i. The VOC emission limit only applies to emissions from equipment associated with the production of products produced in the 4L and SF processing lines. This limit does not apply when the equipment is handling materials for the co-production of products in the 4L or SF and EC44 processing lines.

ii. The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the 4L and South Flowable (SF) processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.


Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 21 tons/yr (2)

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

Emission limits apply to the production of products co-produced in the 4L or SF and EC44 processing lines. This limit applies to the following emission points when products are co-produced in the 4L or SF and EC44 processing lines: EP-EC44(1), EP4L-BH1(1), EPSF –BH1(1), EPSF –BH2(1), EPSF –Vent1(1), EP-B17TF-East(1), EP-B17TF-West(1), EPB17-LO(1), EPB11-LO(1), EP-B13TF-1(1), EPB13-LO(1), and those covered under the 4L Process Line CAP permit(1) and the Building 11 Storage Tanks CAP permit(1). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L or SF and EC44 co-production processing line.

i) The VOC emission limit only applies to emissions from equipment associated with the production of products co-produced in the 4L or SF and EC44 processing lines for emission point EP-EC44. This limit does not apply when the equipment is handling materials for the production of products not co-produced in the 4L or SF and EC44 processing lines.

ii) The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the production of products co-produced in the 4L or SF and EC44 processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.


Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.

(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only loadout materials for the EC12, 4L, and SF, processing lines; materials for or from the production of products co-produced in the 4L or SF and EC44 processing lines (4L/SF/EC44); and for bulk terminal operations (see definition in Condition 5.T) in the B13 Product Loadouts (EP-B13-LO 13-1 - EP-B13-LO 13-8).

(1) For all materials transferred in the B13 Product Loadouts, the owner or operator shall record and document:

a) the loadout used;

b) the VOC-containing material transferred,

c) the origins of the VOC-containing material (i.e. EC12 processing line, bulk terminal operations, etc.); and

d) the amount of VOC-containing material transferred.

(2) For all materials transferred in the B13 Product Loadouts from the listed processing lines, the owner or operator shall record and document:
a) if the material is produced in an MCPU for NESHAP Subpart FFFF; and
b) the vapor pressure.

(3) For all materials transferred in the B13 Product Loadouts for the bulk terminal operations, the owner or operator shall record and document:
   a) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
   b) if the material is an organic liquid, as defined in §63.2406.

(4) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC-containing material transferred in the B13 Product Truck Loadouts.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

Recordkeeping for the 4L and SF VOC Emission Cap
The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission limit cap (25.0 tpy) in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products made in the 4L and South Flowable (SF) processing lines:

Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Bulk Storage Tank Emissions
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

D. The facility shall document each product produced in the 4L or SF processing line. The facility shall also document whether the product is produced alone in the 4L or SF processing line or co-produced with the EC44.

E. For each product produced in the 4L or SF processing line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
The permittee shall identify and document each standard and nonstandard batch used to produce each product.

The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition D.5. The facility shall document and provide a justification for the value for each input used.

The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.
e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in §63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

F. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition D.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

G. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.

H. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.
I. If the 12-month rolling total of the VOC emissions exceeds 19.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

1. The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
2. The total amount of VOC emissions for each product produced, in tons.
3. The total amount of VOC emissions for all products produced, in tons.
4. The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 19.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 19.0 tons, daily recordkeeping will be required per this section of this permit.

Recordkeeping for the 4Lor SF and EC44 VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission (21.0 tpy) limit cap in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products co-produced in the 4L or SF and EC44 processing lines:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Gas Sweep
- Solids Handling
- Evaporation from Screens and Tank Evaporation
- Heating
- Bulk Storage Tank Emissions
- Ancillary Packaging Emissions - Ink Jet & Stenciling
- Laboratory Emissions
- Tank Cleaning Emissions
- Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

J. The facility shall document each product produced in the EC44 processing line. The facility shall also document whether the product is produced in the EC44 processing line or co-produced with the 4L or SF processing lines.
K. For each product co-produced in the EC44 processing line with the 4L or SF processing lines, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product produced.
(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition D.5. The facility shall document and provide a justification for the value for each input used.
(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.
b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).
c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.
d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2,
Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

L. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.

(2) The permittee shall use the operating scenarios required in Condition D.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

M. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.

N. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
The total amount of VOC emissions for each product produced, in tons.

The total amount of VOC emissions for all products produced, in tons.

The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

O. If the 12-month rolling total of the VOC emissions exceeds 17.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

1. The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
2. The total amount of VOC emissions for each product produced, in tons.
3. The total amount of VOC emissions for all products produced, in tons.
4. The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 17.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 17.0 tons, daily recordkeeping will be required per this section of this permit.

NSPS and NESHAP Requirements

P. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

1. The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

Q. For each loadout covered under this permit, the owner or operator shall determine and document:

1. if the loadout is subject to 40 CFR Part 63 Subpart FFFF; and, if subject,
   a) if it is a transfer rack, per the definition in § 63.2550,
   b) to which miscellaneous organic chemical process unit (MCPU) the transfer rack is assigned, using the procedures in § 63.2435(d).
   c) the group status, as defined §63.2550.
2. if the loadout is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

R. The facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of a
miscellaneous organic chemical process unit for the transfer racks covered under this permit, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550. If the facility determines that this transfer rack is subject to the Group 1 requirements in the subpart, the facility shall modify the permit within 30 days to include the requirements of the subpart.

(1) The owner or operator shall determine and document the group status for the transfer racks that are part of a miscellaneous organic chemical process unit for the transfer racks covered under this permit, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

S. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the loadouts in B13.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for product loadout for the packaging and bulk terminal operations

T. Packaging and bulk terminal operations shall include receiving, storing, processing, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. 4L, South Flowable, EC12, 4L/SF/EC44, etc.). These materials are brought to the facility, stored, processed, and then packaged in containers or drums or loaded into tankers or railcars and transferred off site.


(1) The permittee shall maintain the following monthly records for all VOC-containing material for the packaging and bulk terminal operations transferred in the B13 Product Loadouts (EP-B13-LO 13-1 - EP-B13-LO 13-8):
   a) The identification and origins of each VOC-containing material transferred;
   b) A copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;
   c) The amount of VOC-containing material transferred;
   d) The twelve month total rolling total of VOC-containing material transferred.

V. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations loaded out (transferred) in the B13 Product Loadouts (EP-B13-LO 13-1 - EP-B13-LO 13-8) shall be less than 10.0 psia \( \cdot \) lb/lb \( \cdot \) mol.


Conditions for product loadout for the EC12 processing line

W. The amount of VOC-containing material for the EC12 processing line loaded out
(transferred) in the B13 Product Loadouts (EU-B13-LO 13-1 – EU-B13-LO 13-8) shall be less than exceed 25.0 Million Gallons per rolling twelve-month period.

(1) The permittee shall maintain the following monthly records for all VOC-containing material for the EC12 processing line transferred in the B13 Product Loadouts (EU-B13-LO 13-1 – EU-B13-LO 13-8):

a) The identification and origins of each VOC-containing material transferred;

b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;

c) the amount of VOC-containing material transferred;

d) the twelve month total rolling total of VOC-containing material transferred.

X. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the EC12 processing line loaded out (transferred) in the B13 Product Loadouts (EU-B13-LO 13-1 – EU-B13-LO 13-8) shall be less than 10.0 psia ∙ lb/lb ∙ mol.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations transferred in the B13 Product Loadouts (EU-B13-LO 13-1 – EU-B13-LO 13-8).

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
## Emission Point ID Number: Building 15 Storage Tanks

### Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
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<tr>
<td>EP-B15-N</td>
<td>TK40</td>
<td>Building 15 Storage Tank 40</td>
<td>15,500 gallons</td>
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<td>TK41</td>
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<td>None</td>
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<tr>
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<td>TK42</td>
<td>Building 15 Storage Tank 42</td>
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<tr>
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<td>TK43</td>
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<td>TK48</td>
<td>Building 15 Storage Tank 48</td>
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</tr>
<tr>
<td></td>
<td>TK56</td>
<td>Building 15 Storage Tank 56</td>
<td>15,500 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TK57</td>
<td>Building 15 Storage Tank 57</td>
<td>15,500 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TK58</td>
<td>Building 15 Storage Tank 58</td>
<td>15,500 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TK59</td>
<td>Building 15 Storage Tank 59</td>
<td>15,500 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TK60</td>
<td>Building 15 Storage Tank 60</td>
<td>15,500 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TK61</td>
<td>Building 15 Storage Tank 61</td>
<td>15,500 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TK62</td>
<td>Building 15 Storage Tank 62</td>
<td>15,500 gallons</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

EP-B15-E

| EP-B15-N | TK40    | Building 15 Storage Tank 40                | 15,500 gallons          | None                           | 18-A-413 |
|          | TK41    | Building 15 Storage Tank 41                | 15,500 gallons          | None                           |          |
|          | TK42    | Building 15 Storage Tank 42                | 15,500 gallons          | None                           |          |
|          | TK43    | Building 15 Storage Tank 43                | 15,500 gallons          | None                           |          |
|          | TK44    | Building 15 Storage Tank 44                | 15,500 gallons          | None                           |          |
|          | TK45    | Building 15 Storage Tank 45                | 15,500 gallons          | None                           |          |
|          | TK46    | Building 15 Storage Tank 46                | 15,500 gallons          | None                           |          |
|          | TK47    | Building 15 Storage Tank 47                | 15,500 gallons          | None                           |          |
|          | TK48    | Building 15 Storage Tank 48                | 15,500 gallons          | None                           |          |
|          | TK49    | Building 15 Storage Tank 49                | 15,500 gallons          | None                           |          |
|          | TK50    | Building 15 Storage Tank 50                | 15,500 gallons          | None                           |          |
|          | TK51    | Building 15 Storage Tank 51                | 15,500 gallons          | None                           |          |
|          | TK52    | Building 15 Storage Tank 52                | 15,500 gallons          | None                           |          |
|          | TK53    | Building 15 Storage Tank 53                | 15,500 gallons          | None                           |          |
|          | TK54    | Building 15 Storage Tank 54                | 15,500 gallons          | None                           |          |
|          | TK55    | Building 15 Storage Tank 55                | 15,500 gallons          | None                           |          |
|          | TK56    | Building 15 Storage Tank 56                | 15,500 gallons          | None                           |          |
|          | TK57    | Building 15 Storage Tank 57                | 15,500 gallons          | None                           |          |
|          | TK58    | Building 15 Storage Tank 58                | 15,500 gallons          | None                           |          |
|          | TK59    | Building 15 Storage Tank 59                | 15,500 gallons          | None                           |          |
|          | TK60    | Building 15 Storage Tank 60                | 15,500 gallons          | None                           |          |
|          | TK61    | Building 15 Storage Tank 61                | 15,500 gallons          | None                           |          |
|          | TK62    | Building 15 Storage Tank 62                | 15,500 gallons          | None                           |          |

18-A-414
Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Operational Limits & Requirements**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**
A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.  
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only store materials from the bulk terminal operations (see definition in Condition 5.G) in the B15 tank farm. 
   (1) For all materials stored in the Building 15 tank farm, the owner or operator shall determine and document:
      a) the tank used;
      b) the VOC-containing material stored,
      c) the amount of VOC-containing material stored.
      d) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
      e) if the material is an organic liquid, as defined in §63.2406.

   (2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the B15 storage tanks.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
NSPS and NESHAP Requirements

D. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL), as defined in 40 CFR Part 51.100, stored in the bulk storage tanks in B15 shall be less than 15.0 kPa.

(1) The facility shall keep readily accessible records showing the dimensions and capacity for the bulk storage tanks in B15.

(2) The facility shall document the maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL) stored in the bulk storage tanks in B15.

(3) The facility shall notify the Administrator within 30 days if the maximum true vapor pressure of the liquids stored in the bulk storage tanks in B15 exceeds 15.0 kPa.

E. For each tank covered under this permit, the owner or operator shall determine and document if the tank is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

F. The facility shall analyze all changes in material stored in any applicable storage tank and determine if there is a change in applicability for any NSPS or NESHAP subparts.

(1) The facility shall document all changes in the contents of any tank and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for storing materials for bulk terminal operations

G. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. B21, 4L, South Flowable, EC12, EC44, B37, etc.). These materials are brought to the facility, stored, maintained, and then packaged (containers, drums) or loaded into tankers or railcars and transferred to another process or off site.

H. The amount of VOC-containing material for the packaging and bulk terminal operations that is stored in the tanks in B15 tank farm shall not exceed 50.0 Million Gallons per rolling twelve-month period.

(1) The permittee shall maintain the following monthly records for all VOC-containing material for the packaging and bulk terminal operations that is stored in the tanks in B15 tank farm:
   a) The identification and origins of each VOC-containing material;
   b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
   c) the amount of VOC-containing material stored;
   d) the twelve month total rolling total of VOC-containing material process stored.

I. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations that is stored in the tanks in B15 tank farm shall be less than 10.0 psia · lb/lb · mol.
(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations stored in the tanks in B15 tank farm.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

<table>
<thead>
<tr>
<th>EP ID</th>
<th>Stack Height, Feet</th>
<th>Discharge Style</th>
<th>Stack Opening, inches</th>
<th>Stack Temperature, °F</th>
<th>Exhaust Flowrate, SCFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B15-N</td>
<td>12</td>
<td>Downward</td>
<td>6</td>
<td>74</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B15-E</td>
<td>12</td>
<td>Downward</td>
<td>6</td>
<td>74</td>
<td>Displacement</td>
</tr>
</tbody>
</table>

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

- **Agency Approved Operation & Maintenance Plan Required?**  Yes ☐ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?**  Yes ☐ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?**  Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number:** B15-EL

**Associated Equipment**

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): B15-EL

---

**Emission Unit vented through this Emission Point:** B15-EL  
**Emission Unit Description:** Building 15 Equipment Leaks  
**Raw Material/Fuel:** Herbicide  
**Rated Capacity:** N/A

**Applicable Requirements**

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**  
*The emissions from this emission point shall not exceed the levels specified below.*

None at this time.

**Authority for Requirement:** DNR Construction Permit 18-A-415

**Operational Limits & Requirements**  
*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.  
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials handled in the Building 15 (B15) equipment leak components, the owner or operator shall record and document the material handled and the origins of the material (i.e. specific processing line, bulk terminal materials, etc.).  
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials handled in the B15 equipment leak components.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
D. The equipment leak components used in the B15 tank farm and the associated loadouts used for Bulk Transfer Operations shall have a maximum of 131 light liquid valves, 8 light liquid pumps, 622 light liquid connectors, and 2 sample connections. The process shall not use any heavy liquid components, gas valves, compressors, open-ended lines, agitators, or pressure relief valves that are in VOC service. This shall include all of the equipment leak components used in the B15 tank farm and the associated loadouts to handle any VOC-containing material.

(1) The owner or operator shall document the number of each type equipment leak component used in B25 tank farm and the associated loadouts used for Bulk Transfer Operations. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1020, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

NESHAP Requirements (Building 21 Process Area, EC12 Processing Line)

E. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

F. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in the referenced subparts F, H, or UU.

(1) The permittee shall document the subpart they are complying with, and meet all of the applicable requirements as specified in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the permittee is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1020 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the permittee shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed.

G. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in Buildings 21, 25, 26, and 27.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 18-A-415
**Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes ☐ No ☒</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Approved Operation &amp; Maintenance Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
</tbody>
</table>

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Building 15 Loadouts and Hose

Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B15-LO-1</td>
<td>B15-LO-1</td>
<td>Building 15 Loadout 1</td>
<td>2,500 gallons/hr</td>
<td>None</td>
<td>18-A-410</td>
</tr>
<tr>
<td>EP-B15-Hose</td>
<td>B15-Hose</td>
<td>Building 15 Loadout Hose</td>
<td>2,500 gallons/hr</td>
<td>None</td>
<td>18-A-412</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Operational Limits & Requirements**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

   (1) For all materials transferred in the Building 15 Loadouts, the owner or operator shall record and document:
      a) the loadout used;
b) the amount of VOC-containing material transferred;
c) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
d) if the material is an organic liquid, as defined in §63.2406

(2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC-containing material transferred in the Building 15 Loadouts.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

NSPS and NESHAP Requirements

D. For each loadout covered under this permit, the owner or operator shall determine and document if the loadout is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

E. The facility shall analyze all changes in the material transferred, process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the loadouts in B15.
   (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for product loadout for the bulk terminal operations for Building 15

F. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. B21, 4L, South Flowable, EC12, EC44, B37, etc.) for Building 15. These materials are brought to the facility, stored, maintained, and then packaged in containers or drums or loaded into tankers or railcars and transferred to another process or off site.

G. The amount of VOC-containing material for the packaging and bulk terminal operations loaded out (transferred) in the B11 Product Tanker Loadout (EU-B11-LO) and the Product Packaging, Mini-bulk Loadout (EU-B11-Packaging), EU-B15-LO-1, EU-B15-LO-2, and EU-B15-Hose shall not exceed 50.0 Million Gallons per rolling twelve-month period.
   (1) The permittee shall maintain the following monthly records for all VOC-containing material for the packaging and bulk terminal operations transferred in emission units EU-B11-LO and EU-B11-Packaging and Building 15 (B15):
      a) The identification and origins of each VOC-containing material transferred;
      b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;
      c) the amount of VOC-containing material transferred;
      d) the twelve month total rolling total of VOC-containing material transferred.

H. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations loaded out (transferred) in the B11
Product Tanker Loadout (EU-B11-LO), the Product Packaging and Mini-bulk Loadout (EU-B11-Packaging), EU-B15-LO-1, EU-B15-LO-2, and EU-B15-Hose, shall be less than 10.0 psia \cdot \text{lb/lb} \cdot \text{mol}.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations transferred in emission units EU-B11-LO, EU-B11-Packaging, EU-B15-LO-1, EU-B15-LO-2, and EU-B15-Hose.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

- **Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Building 17 Truck Loadouts

Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B17-LO 17-1</td>
<td>EU-B17-LO 17-1</td>
<td>Building 17 Truck Loadout 1</td>
<td>400 gallons/min</td>
<td>None</td>
<td>17-A-204-S1</td>
</tr>
<tr>
<td>EP-B17-LO 17-3</td>
<td>EU-B17-LO 17-3</td>
<td>Building 17 Truck Loadout 3</td>
<td>400 gallons/min</td>
<td>None</td>
<td>19-A-430</td>
</tr>
<tr>
<td>EP-B17-LO 17-4</td>
<td>EU-B17-LO 17-4</td>
<td>Building 17 Truck Loadout 4</td>
<td>400 gallons/min</td>
<td>None</td>
<td>19-A-431</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 25 tons/yr (1)

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

---

(1) Emission limits requested by facility to limit the potential emissions for the 4L and South Flowable (SF) processing lines below the PSD significance thresholds. This limit applies to the following emission points: EP4L-BH1, EPSF-BH1, EPSF-BH2, EPSF-Vent1, EP-B17TF-East, EP-B17TF-West, EPB17-LO(iii), EPB11-LO, EP-B13TF-1, EPB13-LO, and those covered under the 4L Process Line CAP permit and the Building 11 Storage Tanks CAP permit. The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L and South Flowable (SF) processing lines.

i. The VOC emission limit only applies to emissions from equipment associated with the production of products produced in the 4L and SF processing lines. This limit does not apply when the equipment is handling materials for the co-production of products in the 4L or SF and EC44 processing lines.

ii. The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the 4L and South Flowable (SF) processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.


Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 21 tons/yr (2)

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

---

(2) Emission limits requested by facility to limit the potential emissions from the production of products co-produced in the 4L or SF and EC44 processing lines below the PSD significance thresholds. This limit applies to the following emission points when products are co-produced in the 4L or SF and EC44.
processing lines: EP-EC44(i), EP4L-BH1(i), EPSF-BH1(i), EPSF-BH2(i), EPSF-Vent1(i), EP-B17TF-East(i), EP-B17TF-West(i), EPB17-LO(i), EPB11-LO(i), EP-B13TF-1(i), EPB13-LO(i), and those covered under the 4L Process Line CAP permit(i) and the Building 11 Storage Tanks CAP permit(ii). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L or SF and EC44 co-production processing line.

i) The VOC emission limit only applies to emissions from equipment associated with the production of products co-produced in the 4L or SF and EC44 processing lines for emission point EP-EC44. This limit does not apply when the equipment is handling materials for the production of products not co-produced in the 4L or SF and EC44 processing lines.

ii) The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the production of products co-produced in the 4L or SF and EC44 processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.


Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only loadout materials for the EC12, 4L, and SF, processing lines; materials for or from the production of products co-produced in the 4L or SF and EC44 processing lines (4L/SF/EC44); and for bulk terminal operations (see definition in Condition 5.T) in the B17 Product Truck Loadouts (EP-B17-LO 17-1 - EP-B17-LO 17-4).
   (1) For all materials transferred in the B17 Product Truck Loadouts, the owner or operator shall record and document:
      a) the loadout used;
      b) the VOC-containing material transferred,
      c) the origins of the VOC-containing material (i.e. EC12 processing line, bulk terminal operations, etc.); and
      d) the amount of VOC-containing material transferred.
   (2) For all materials transferred in the B17 Product Truck Loadouts from the listed processing lines, the owner or operator shall record and document:
      a) if the material is produced in an MCU for NESHAP Subpart FFFF; and
b) the vapor pressure.
(3) For all materials transferred in the B17 Product Truck Loadouts for the bulk terminal operations, the owner or operator shall record and document:
   a) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
   b) if the material is an organic liquid, as defined in §63.2406.
(4) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC-containing material transferred in the B17 Product Truck Loadouts.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

Recordkeeping for the 4L and SF VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission limit cap (25.0 tpy) in emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products made in the 4L and South Flowable (SF) processing lines:

Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Bulk Storage Tank Emissions
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

D. The facility shall document each product produced in the 4L or SF processing line. The facility shall also document whether the product is produced alone in the 4L or SF processing line or co-produced with the EC44.
E. For each product produced in the 4L or SF processing line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.

(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition ED.5. The facility shall document and provide a justification for the value for each input used.

(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.
e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

F. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition ED.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

G. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.

H. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.
I. If the 12-month rolling total of the VOC emissions exceeds 19.0 tons from all emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

1. The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
2. The total amount of VOC emissions for each product produced, in tons.
3. The total amount of VOC emissions for all products produced, in tons.
4. The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit drops below 19.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 19.0 tons, daily recordkeeping will be required per this section of this permit.

**Recordkeeping for the 4L or SF and EC44 VOC Emission Cap**

The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission (21.0 tpy) limit cap in emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products co-produced in the 4L or SF and EC44 processing lines:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Gas Sweep
- Solids Handling
- Evaporation from Screens and Tank Evaporation
- Heating
- Bulk Storage Tank Emissions
- Ancillary Packaging Emissions - Ink Jet & Stenciling
- Laboratory Emissions
- Tank Cleaning Emissions
- Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.
J. The facility shall document each product produced in the EC44 processing line. The facility shall also document whether the product is produced in the EC44 processing line or co-produced with the 4L or SF processing lines.

K. For each product co-produced in the EC44 processing line with the 4L or SF processing lines, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product produced.

(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.

(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition KD.5. The facility shall document and provide a justification for the value for each input used.

(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for
Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

L. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition KD.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

M. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.
N. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

O. If the 12-month rolling total of the VOC emissions exceeds 17.0 tons from all emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in Section 1 of this permit drops below 17.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 17.0 tons, daily recordkeeping will be required per this section of this permit.

NSPS and NESHAP Requirements

P. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (4) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

Q. For each loadout covered under this permit, the owner or operator shall determine and document:
   (3) if the loadout is subject to 40 CFR Part 63 Subpart FFFF; and, if subject:
      d) if it is a transfer rack, per the definition in § 63.2550,
      e) to which miscellaneous organic chemical process unit (MCPU) the transfer rack is assigned, using the procedures in § 63.2435(d).
      f) the group status, as defined §63.2550.
   (4) if the loadout is subject to 40 CFR Part 63 Subpart EEEE, National Emission
Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

R. The facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of a miscellaneous organic chemical process unit for the transfer racks covered under this permit, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550. If the facility determines that this transfer rack is subject to the Group 1 requirements in the subpart, the facility shall modify the permit within 30 days to include the requirements of the subpart.

(2) The owner or operator shall determine and document the group status for the transfer racks that are part of a miscellaneous organic chemical process unit for the transfer racks covered under this permit, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

S. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the B17 Product Truck Loadouts (EP-B17-LO 17-1 - EP-B17-LO 17-4).

(3) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for product loadout for the packaging and bulk terminal operations

T. Packaging and bulk terminal operations shall include receiving, storing, processing, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. 4L, South Flowable, 4L/SF/EC44, etc.). These materials are brought to the facility, stored, processed, and then packaged in containers or drums or loaded into tankers or railcars and transferred off site.

U. The amount of VOC-containing material for the packaging and bulk terminal operations loaded out (transferred) in the B17 Product Truck Loadouts (EP-B17-LO 17-1 - EP-B17-LO 17-4) shall not exceed 60.0 Million Gallons per rolling twelve-month period.

(1) The permittee shall maintain the following monthly records for all VOC-containing material for the packaging and bulk terminal operations transferred in the B17 Product Truck Loadouts (EP-B17-LO 17-1 - EP-B17-LO 17-4):
   a) The identification and origins of each VOC-containing material transferred;
   b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;
   c) the amount of VOC-containing material transferred;
   d) the twelve month total rolling total of VOC-containing material transferred.

V. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations loaded out (transferred) in the B17 Product Truck Loadouts (EP-B17-LO 17-1 - EP-B17-LO 17-4) shall be less than 10.0 psia ∙ lb/lb ∙ mol.

(1) The facility shall document the product of the true vapor pressure and the molecular

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Building 17 Packaging

Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-EC17 - PR1</td>
<td>EU-EC17-PR1</td>
<td>B17 Packing Reservoir</td>
<td>34 gallons</td>
<td>None</td>
<td>19-A-092</td>
</tr>
<tr>
<td>EP- EC17 -PL1</td>
<td>EU- EC17-PL1</td>
<td>B17 Packaging Line</td>
<td>12,000 gallons/hr</td>
<td>None</td>
<td>19-A-093</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dcf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 22 tons/yr\(^{(1)}\)
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

(2) Emission limits apply to EC17 Processing Line. This limit applies to all of the emission units and emission episodes listed in operational limit section of this permit.

**Operational Limits & Requirements**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

P. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.

(2) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

Q. For all VOC containing materials used in EC17 Processing Line, the owner or operator shall record and document the materials used.
R. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

S. The permittee shall produce a maximum of 7.0 million gallons of product in the EC17 Processing Plant per rolling 12-month period.
(2) The owner or operator shall record on a monthly basis the amount of product produced in the EC17 Processing Plant, in gallons, and calculate and record rolling 12-month totals.

Recordkeeping for the EC17 Processing Line VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in Condition 1 of this permit for the EC17 Processing Line. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points EC17-1 and EC17-2 and the EC17 Packaging Line as well as those from miscellaneous sources related to EC17 Processing Line production, including emissions from drum heating, ancillary packaging emissions, laboratory activity, and tank and floor cleaning. The limit also covers emissions from the B12 Packaging Line and Tank TK-22 in building B13 when processing materials from the EC17 Processing Line. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the EC17 Processing Line:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation
Heating
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

T. For each product produced in the EC17 Processing Line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
(8) The permittee shall identify and document each product produced.
(9) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
(10) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the
equations listed below in Condition 5.E. The facility shall document and provide a justification for the value for each input used.

(11) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(12) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

h. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used.

i. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or more recent) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

j. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG).

k. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

l. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

m. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

n. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.
(13) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(14) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

U. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(2) The permittee shall use the operating scenarios required in Condition 5.E above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

V. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in Condition 1 of this permit:

(3) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(4) The daily number of standard and nonstandard batches completed for each product produced.

W. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in Condition 1 of this permit:

(5) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(6) The total amount of VOC emissions for each product produced, in tons.

(7) The total amount of VOC emissions for all products produced, in tons.

(8) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

X. If the 12-month rolling total of the VOC emissions exceeds 18.0 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(5) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.

(6) The total amount of VOC emissions for each product produced, in tons.

(7) The total amount of VOC emissions for all products produced, in tons.

(8) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in Condition 1 of this permit drops below 18.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of
VOC emissions will cease per this section of this permit. If the emissions once again exceed 18.0 tons, daily recordkeeping will be required per this section of this permit.

**NSPS and NESHAP Requirements**

Y. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(2) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

Z. All batch process vents that are part of the miscellaneous organic chemical process unit for the EC17 Processing Line shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(4) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the EC17 Processing Line and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(5) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the EC17 Processing Line) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

(6) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525 (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:

   e. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.

   f. A record of whether each batch operated was considered a standard batch.

   g. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

   h. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

AA. The material stored in the storage tanks that are part of the miscellaneous organic chemical process unit for the EC17 Processing Line with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) The owner or operator shall determine and document the group status for the storage tanks that are part of the miscellaneous organic chemical process unit for the EC17 Processing Line, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

BB. Any wastewater streams that are part of the miscellaneous organic chemical process unit for the EC17 Processing Line shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.
(2) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

CC. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

DD. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the EC17 Processing Line.
(2) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

<table>
<thead>
<tr>
<th>Agency Approved Operation &amp; Maintenance Plan Required?</th>
<th>Yes ☐ No ☒</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
</tbody>
</table>

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: B17TF-East

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): TK99 – TK112

Emission Unit vented through this Emission Point: TK99 – TK112
Emission Unit Description: Building 17 East Storage Tanks 99-112
Raw Material/Fuel: Herbicide
Rated Capacity: 37,542 Gallons

Applicable Requirements

Emission Limits (lb/hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 25 tons/yr (1)
Authority for Requirement: DNR Construction Permit 17-A-205-S1

(1) Emission limits apply to the 4L and South Flowable (SF) processing lines. This limit applies to the following emission points: EP4L-BH1(i), EPSF –BH1(i), EPSF –BH2(i), EPSF –Vent1(i), EP-B17TF-East(i) (ii), EP-B17TF-West(i) (ii), EPB17-LO(i) (ii), EPB11-LO(i) (ii), EP-B13TF-1(i) (ii), EPB13-LO(i) (ii), and those covered under the 4L Process Line CAP permit(i) and the Building 11 Storage Tanks CAP permit(ii). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L and South Flowable (SF) processing lines.
   i) The VOC emission limit only applies to emissions from equipment associated with the production of products produced in the 4L and SF processing lines. This limit does not apply when the equipment is handling materials for the co-production of products in the 4L or SF and EC44 processing lines.
   ii) The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the 4L and South Flowable (SF) processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 21 tons/yr (2)
Authority for Requirement: DNR Construction Permit 17-A-205-S1

(2) Emission limits apply to the production of products co-produced in the 4L or SF and EC44 processing lines. This limit applies to the following emission points when products are co-produced in the 4L or SF and EC44 processing lines: EP-EC44(iii), EP4L-BH1, EPSF –BH1, EPSF –BH2, EPSF –Vent1, EP-B17TF-East(iii), EP-B17TF-West(iii), EPB17-LO(iii), EPB11-LO(iii), EP-B13TF-1(iii), EPB13-LO(iii), and those covered under the 4L Process Line CAP permit and the Building 11 Storage Tanks CAP permit(iii). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L or SF and EC44 co-production processing line.
   i) The VOC emission limit only applies to emissions from equipment associated with the production of products co-produced in the 4L or SF and EC44 processing lines for emission point EP-EC44.
limit does not apply when the equipment is handling materials for the production of products not co-produced in the 4L or SF and EC44 processing lines.

ii) The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the production of products co-produced in the 4L or SF and EC44 processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only store materials for the 4L and South Flowable (SF) processing lines; materials for or from the production of products co-produced in the 4L or SF and EC44 processing lines (4L/SF/EC44); and for bulk terminal operations in the Building 17 (B17) tank farm.
   (1) For all materials stored in the tanks in the Building 17 (B17) tank farm, the owner or operator shall record and document the tank used, the material stored, the origins of the material (i.e. 4L, South Flowable (SF), and 4L/SF/EC44 processing lines; and bulk terminal operations) and amount of VOC-containing material stored.
   (2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the tanks in the B17 tank farm.

C. The permittee shall keep all ports and manways on the tanks in a closed position at all times when storing liquid materials other than when adding materials, measuring liquid heights, and cleaning or maintaining the tanks. Materials must be added to the tank in a manner that minimizes emissions.
   (1) The owner or operator shall inspect the tanks quarterly to ensure all ports and manways are closed. The facility shall document the results of the inspection.

D. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (2) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.
Recordkeeping for the 4L and SF VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission limit cap (25.0 tpy) in Condition 1 of this permit. These requirements pertain to the following emission episodes for the production of products made in the 4L and South Flowable (SF) processing lines:

Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Bulk Storage Tank Emissions
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

E. The facility shall document each product produced in the 4L or SF processing line. The facility shall also document whether the product is produced alone in the 4L or SF processing line or co-produced with the EC44.

F. For each product produced in the 4L or SF processing line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition F(5). The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
   (5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee.
according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.
The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

G. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.
   (1) The permittee shall use the operating scenarios required in Condition FD.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

H. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit:
   (1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
   (2) The daily number of standard or nonstandard batches completed for each product produced.

I. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

J. If the 12-month rolling total of the VOC emissions exceeds 19.0 tons from all emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.
Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in Condition 1 of this permit drops below 19.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 19.0 tons, daily recordkeeping will be required per this Condition of this permit.

Recordkeeping for the 4L or SF and EC44 VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission (21.0 tpy) limit cap in emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products co-produced in the 4L or SF and EC44 processing lines:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Gas Sweep
- Solids Handling
- Evaporation from Screens and Tank Evaporation
- Heating
- Bulk Storage Tank Emissions
- Ancillary Packaging Emissions - Ink Jet & Stenciling
- Laboratory Emissions
- Tank Cleaning Emissions
- Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

K. The facility shall document each product produced in the EC44 processing line. The facility shall also document whether the product is produced in the EC44 processing line or co-produced with the 4L or SF processing lines.

L. For each product co-produced in the EC44 processing line with the 4L or SF processing lines, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

1. The permittee shall identify and document each product produced.
2. The permittee shall identify and document each standard and nonstandard batch used to produce each product.
3. The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in
the equations listed below in Condition LD.5. The facility shall document and provide a justification for the value for each input used.

(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.
f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

M. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition L.D.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

N. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.

O. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.
P. If the 12-month rolling total of the VOC emissions exceeds 17.0 tons from all emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit drops below 17.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 17.0 tons, daily recordkeeping will be required per this Condition of this permit.

NSPS and NESHAP Requirements

Q. The tanks vented by EP-B17TF-West in the B17 Tank Farm shall not store liquids with a true vapor pressure of greater than 15 kilopascals (kPa).
   (1) For all material stored in the tanks vented by EP-B17TF-West the owner or operator shall record and document the maximum true vapor pressure.

R. The owner or operator shall determine and document which storage tank covered under this permit is subject to 40 CFR Part 63 Subpart FFFF, and, if subject, to which miscellaneous organic chemical process unit (MCPU) the tank is assigned, using the procedures in § 63.2435 (d), if applicable.

S. The material stored in the storage tanks that are part of the miscellaneous organic chemical process unit with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall determine and document the group status for the storage tanks covered under this permit that are part of any miscellaneous organic chemical process unit, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

T. The facility shall analyze all changes in material stored in any applicable storage tank and determine if there is a change in applicability for any NSPS or NESHAP subparts.
   (1) The facility shall document all changes in the contents of the tanks or process or formulations changes to any tank that is part of a MCPU and the results of all NSPS or NESHAP determinations made for these changes.
Conditions for storing materials for the bulk terminal operations

U. Bulk terminal operations shall include receiving, storing, processing, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. 4L, South Flowable (SF), 4L/SF/EC44, etc.). These materials are brought to the facility, stored, processed, and then loaded into tankers or railcars and transferred off site.

V. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations that is stored in the tanks in B17 tank farm shall be less than 10.0 psia ∙ lb/lb ∙ mol.

   (1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations stored in the tanks in B17 tank farm.

Authority for Requirement: DNR Construction Permit 17-A-205-S1

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 17-A-205-S1

40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 10
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): Displacement
Exhaust Temperature (°F): 70
Discharge Style: Downward

Authority for Requirement: DNR Construction Permit 17-A-205-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
**Monitoring Requirements**
*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

Agency Approved Operation & Maintenance Plan Required?  Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required?  Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required?  Yes ☐ No ☒

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Number: B17TF-West

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): TK113 – TK119

Emission Unit vented through this Emission Point: TK113 – TK119
Emission Unit Description: Building 17 West Storage Tanks 113-119
Raw Material/Fuel: Herbicide
Rated Capacity: 37,542 Gallons

Applicable Requirements

**Emission Limits (lb/hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 25 tons/yr (1)
Authority for Requirement: DNR Construction Permit 17-A-206-S1

(1) Emission limits apply to the 4L and South Flowable (SF) processing lines. This limit applies to the following emission points: EP4L-BH1(i), EPSF –BH1(i), EPSF –BH2(i), EPSF –Vent1(i), EP-B17TF-East(i) (ii), EP-B17TF-West(i) (ii), EPB17-LO(i) (ii), EPB11-LO(i) (ii), EP-B13TF-1(i) (ii), EPB13-LO(i) (ii), and those covered under the 4L Process Line CAP permit(i) and the Building 11 Storage Tanks CAP permit(i) (ii). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L and South Flowable (SF) processing lines.
   i) The VOC emission limit only applies to emissions from equipment associated with the production of products produced in the 4L and SF processing lines. This limit does not apply when the equipment is handling materials for the co-production of products in the 4L or SF and EC44 processing lines.
   ii) The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the 4L and South Flowable (SF) processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 21 tons/yr (2)
Authority for Requirement: DNR Construction Permit 17-A-206-S1

(2) Emission limits apply to the production of products co-produced in the 4L or SF and EC44 processing lines. This limit applies to the following emission points when products are co-produced in the 4L or SF and EC44 processing lines: EP-EC44(1), EP4L-BH1, EPSF –BH1, EPSF –BH2, EPSF –Vent1, EP-B17TF-East(1(ii), EP-B17TF-West(1(ii), EPB17-LO(1(ii), EPB11-LO(1(ii), EP-B13TF-1(1(ii), EPB13-LO(1(ii), and those covered under the 4L Process Line CAP permit and the Building 11 Storage Tanks CAP permit(1(iii)). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L or SF and EC44 co-production processing line.
   i) The VOC emission limit only applies to emissions from equipment associated with the production of products co-produced in the 4L or SF and EC44 processing lines for emission point EP-EC44. This
limit does not apply when the equipment is handling materials for the production of products not co-produced in the 4L or SF and EC44 processing lines.

ii) The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the production of products co-produced in the 4L or SF and EC44 processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only store materials for the 4L and South Flowable (SF) processing lines; materials for or from the production of products co-produced in the 4L or SF and EC44 processing lines (4L/SF/EC44); and for bulk terminal operations in the Building 17 (B17) tank farm.
   (1) For all materials stored in the tanks in the Building 17 (B17) tank farm, the owner or operator shall record and document the tank used, the material stored, the origins of the material (i.e. 4L, South Flowable (SF), and 4L/SF/EC44 processing lines; and bulk terminal operations) and amount of VOC-containing material stored.
   (2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the tanks in the B17 tank farm.

C. The permittee shall keep all ports and manways on the tanks in a closed position at all times when storing liquid materials other than when adding materials, measuring liquid heights, and cleaning or maintaining the tanks. Materials must be added to the tank in a manner that minimizes emissions.
   (1) The owner or operator shall inspect the tanks quarterly to ensure all ports and manways are closed. The facility shall document the results of the inspection.

D. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.
Recordkeeping for the 4L and SF VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission limit cap (25.0 tpy) in emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products made in the 4L and South Flowable (SF) processing lines:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Gas Sweep
- Solids Handling
- Evaporation from Screens and Tank Evaporation
- Heating
- Bulk Storage Tank Emissions
- Ancillary Packaging Emissions - Ink Jet & Stenciling
- Laboratory Emissions
- Tank Cleaning Emissions
- Floor Cleaning Emissions
- Ancillary Packaging Emissions - Ink Jet & Stenciling

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

E. The facility shall document each product produced in the 4L or SF processing line. The facility shall also document whether the product is produced alone in the 4L or SF processing line or co-produced with the EC44.

F. For each product produced in the 4L or SF processing line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition F.5. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
   (5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission
factor or emission estimation method shall be subject to the review and approval of
the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct
emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the
production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor
Displacement, Process Tank Cleaning, and Packaging the appropriate equations
and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or
Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2,
Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other
Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods
for Estimating Air Emissions from Chemical Manufacturing Facilities, Section
3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage
tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate
equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant
Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods
provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission
Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8,
Methods for Estimating Air Emissions from Paint, Ink, and Other Coating
Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for
Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2
shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided
in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2,
Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other
Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16,
Methods for Estimating Air Emissions from Chemical Manufacturing Facilities,
Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty
vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63,
Subpart GGG) shall be used. Engineering assessments, as described in
63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate
estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart
GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable,
stack testing or standard engineering principles shall be used to best represent the
emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or
emission estimation methods used for each emission episode.
(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

G. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition F6.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

H. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.

I. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

J. If the 12-month rolling total of the VOC emissions exceeds 19.0 tons from all emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit drops below 19.0 tons for the remainder of
the current calendar month plus one additional calendar month. At that time, rolling daily
calculation of VOC emissions will cease per this Condition of this permit. If the emissions
once again exceed 19.0 tons, daily recordkeeping will be required per this Condition of this
permit.

Recordkeeping for the 4Lor SF and EC44 VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with
the VOC ton per year emission (21.0 tpy) limit cap in emission limit section of this permit.
These requirements pertain to the following emission episodes for the production of products
co-produced in the 4L or SF and EC44 processing lines:

Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Bulk Storage Tank Emissions
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission
episodes in this permit as well as the emission episodes in the other permits that contain the
VOC ton per year emission limit cap, as well as a number of unpermitted units, including
Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and
Floor Cleaning Emissions.

K. The facility shall document each product produced in the EC44 processing line. The
   facility shall also document whether the product is produced in the EC44 processing line
   or co-produced with the 4L or SF processing lines.
L. For each product co-produced in the EC44 processing line with the 4L or SF processing
   lines, that uses a VOC-containing material, the permittee shall determine and record the
   VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce
   the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used
       to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard
       batch. The operating scenario shall list all of the inputs (throughputs, temperatures,
       vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in
       the equations listed below in Condition LD.5. The facility shall document and provide
       a justification for the value for each input used.
(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.
g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.
(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

M. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.
   (1) The permittee shall use the operating scenarios required in Condition L D.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

N. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit:
   (1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
   (2) The daily number of standard or nonstandard batches completed for each product produced.

O. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

P. If the 12-month rolling total of the VOC emissions exceeds 17.0 tons from all emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in Condition 1 of this permit drops below 17.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 17.0 tons, daily recordkeeping will be required per this Condition of this permit.

NSPS and NESHAP Requirements

Q. The tanks vented by EP-B17TF- West in the B17 Tank Farm shall not store liquids with a true vapor pressure of greater than 15 kilopascals (kPa).
   (1) For all material stored in the tanks vented by EP-B17TF- West the owner or operator shall record and document the maximum true vapor pressure.

R. The owner or operator shall determine and document which storage tank covered under this permit is subject to 40 CFR Part 63 Subpart FFFF, and, if subject, to which miscellaneous organic chemical process unit (MCPU) the tank is assigned, using the procedures in § 63.2435 (d), if applicable.

S. The material stored in the storage tanks that are part of the miscellaneous organic chemical process unit with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall determine and document the group status for the storage tanks covered under this permit that are part of any miscellaneous organic chemical process unit, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

T. The facility shall analyze all changes in material stored in any applicable storage tank and determine if there is a change in applicability for any NSPS or NESHAP subparts.
   (1) The facility shall document all changes in the contents of the tanks or process or formulations changes to any tank that is part of a MCU and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for storing materials for the bulk terminal operations

U. Bulk terminal operations shall include receiving, storing, processing, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. 4L, South Flowable (SF), 4L/SF/EC44, etc.). These materials are brought to the facility, stored, processed, and then loaded into tankers or railcars and transferred off site.
V. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations that is stored in the tanks in B17 tank farm shall be less than 10.0 psia \cdot \text{lb/lb} \cdot \text{mol}.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations stored in the tanks in B17 tank farm.

Authority for Requirement: DNR Construction Permit 17-A-206-S1

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 17-A-206-S1

40 CFR 63 Subpart FFFF

567 IAC 23.1(4)"cf"

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 8
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): Displacement
Exhaust Temperature (°F): 70
Discharge Style: Downward

Authority for Requirement: DNR Construction Permit 17-A-206-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes □ No ☒
Facility Maintained Operation & Maintenance Plan Required? Yes □ No ☒
Compliance Assurance Monitoring (CAM) Plan Required? Yes □ No ☒

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number: B17-EL**

**Associated Equipment**

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): B17-EL

Emission Unit vented through this Emission Point: B17-EL
Emission Unit Description: Building 17 Tank Farm Equipment Leaks
Raw Material/Fuel: Herbicide
Rated Capacity: N/A

**Applicable Requirements**

**Emission Limits (lb/hr, gr./dsfe, lb./MMBtu, % opacity, etc.)**
*The emissions from this emission point shall not exceed the levels specified below.*

None at this time.

Authority for Requirement: DNR Construction Permit 17-A-207

**Operational Limits & Requirements**
*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials handled in the Building 17 (B17) equipment, the owner or operator shall record and document the material handled and the origins of the material (i.e. 4L and SF processing lines, bulk terminal materials).
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials handled in the B17 equipment.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
D. The equipment used in the B17 tank farm and the associated loadouts shall have a maximum of 172 heavy liquid valves, 9 heavy liquid pumps, 700 heavy liquid connectors, and 6 heavy liquid sample connections. The process shall not use any light liquid components, gas valves, compressors, agitators, open-ended lines, or pressure relief valves. This shall include all of the equipment used in the B17 tank farm and the associated loadouts to handle any VOC-containing material.

(1) The owner or operator shall count and document the number and types of components used in B17. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NSPS 40 CFR Part 60 Subpart VVa, §60.481a, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

**NSPS and NESHAP Subpart FFFF Requirements**

E. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in B17.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

F. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing–Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

Authority for Requirement: DNR Construction Permit 17-A-207

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 17-A-207

40 CFR 63 Subpart FFFF

567 IAC 23.1(4)"cf"
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

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<tr>
<th>Requirement</th>
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<td>Agency Approved Operation &amp; Maintenance Plan Required?</td>
<td></td>
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<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
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<td>No</td>
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Authority for Requirement: 567 IAC 22.108(3)
### Emission Point ID Number: Building 21 Storage Tanks

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<th>EU#</th>
<th>Emission Unit Description</th>
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</table>
Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

**Limits for EPs B21D and B21-H**

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 21 tons/yr(1)

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

(1) Emission limit apply to B21 Process Area. This limit applies to all of the emission units and emission episodes listed in operational limit section of this permit. Only the storage tanks exhausted by EP-21-D and EP-21-H are part of the B21 Process Area and subject to this limit.

**Operational Limits & Requirements**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**
A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only store materials from the bulk terminal operations (see definition in Condition 5.H) and the B21 Process Area in B21 tank farm. The owner or operator shall only use the tanks vented by EP-B21-D and EP-B21-H to store materials for the B21 Process Area.
   (1) For all materials stored in the B21 tank farm, the owner or operator shall determine and document:
a) the tank used;
b) the VOC-containing material transferred;
c) the origins of the VOC-containing material (i.e. B21 Process Area, bulk terminal operations, etc.); and
d) the amount of VOC-containing material stored.

(2) For all materials stored in the Building 21 Tank Farm for the B21 Process Area, the owner or operator shall also determine and document:
a) if the material is produced in an MCPU for NESHAP Subpart FFFF; and
b) the maximum true vapor pressure.

(3) For all materials stored in the Building 21 Tank Farm from the bulk terminal operations, the owner or operator shall also determine and document:
a) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of NESHAP Subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
b) if the material is an organic liquid, as defined in §63.2406.

(4) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the B21 storage tanks.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

Recordkeeping Requirements for the Building 21 Process Area VOC Emission Cap
The following monitoring and recordkeeping requirements shall be used to show compliance with the VOC emission limit cap in the emission limit section of this permit for the Building 21 Process Area. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points EP-B21PA-Vent1, EP-B21PA-Pack1, EP-B21PA-Pack 2, EP-B21-D, EP-B21-H, EP-B21-LO-8, & EP-B21-Packaging, as well as those from miscellaneous sources related to B21 Process Area production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The VOC emission limit covers the following emission episodes from these emission units for the production (formulation and repackaging) of products made in the Building 21 Process Area:

- Vapor Displacement (Process Tank Material Loading, Bulk Loadout, Vessel/Container Filling/Packaging, Process Tank Cleaning)
- Storage Tanks
- Gas Sweep
- Evaporation from Screens and Open Tanks
- Heating
- Solids Handling
- Ancillary Packaging Emissions - Ink Jet & Stenciling
- Laboratory Emissions
- Tank Cleaning Emissions
- Floor Cleaning Emissions
The facility must keep the following records to show compliance with the VOC emission limit cap:

D. For each product produced in the Building 21 Process Area, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

1. The permittee shall identify and document each product produced (formulated or repackaged) in the Building 21 Process Area.

2. The permittee shall identify and document each standard and nonstandard batch used to produce each product.

3. The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition D.5. The facility shall document and provide a justification for the value for each input used.

4. The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

5. The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Vapor Displacement: Material Loading, Bulk Loadout (Filling), Vessel/Container Filling, Process Tank Cleaning, and Packaging, the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for
Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

(d) For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

(e) For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

(f) For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

(g) For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

E. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition D.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

F. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.

G. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in emission limit section of this permit:
(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

H. If the 12-month rolling total of the VOC emissions exceeds 16.0 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in Condition 1 of this permit drops below 16.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 16.0 tons, daily recordkeeping will be required per this Condition of this permit.

NSPS and NESHAP Requirements
I. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic liquids (VOLs), as defined in 40 CFR Part 60.111b, stored in the bulk storage tanks in B21 shall be less than 15.0 kPa.
(1) The facility shall keep readily accessible records showing the dimensions and capacity for the bulk storage tanks in B21.
(2) The facility shall document the maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic liquids (VOLs) stored in the bulk storage tanks in B21.
(3) The facility shall notify the Administrator within 30 days if the maximum true vapor pressure of the liquids stored in the bulk storage tanks in B21 exceeds 15.0 kPa.

J. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

K. For each storage tank covered under this permit, the owner or operator shall determine
and document if the storage tank is subject to 40 CFR Part 63 Subpart FFFF, and, if subject, to which miscellaneous organic chemical process unit (MCPU) the tank is assigned, using the procedures in § 63.2435 (d), if applicable.

L. The material stored in the bulk storage tanks in B21 that are part of a miscellaneous organic chemical process unit, and with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure 6.9 kilopascals at an existing source or greater than or equal to 0.69 kilopascals at a new source, as specified for Group 2 storage tanks, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the maximum true vapor pressure of each material stored and the group status for each storage tanks that is part of a miscellaneous organic chemical process unit in the B21 Tank Farm, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

M. For each tank covered under this permit, the owner or operator shall determine and document if the tank is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

N. The facility shall analyze all changes in material stored in any applicable storage tank and determine if there is a change in applicability for any NSPS or NESHAP subparts.

(1) The facility shall document all changes in the contents of any tank and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for storing materials for the bulk terminal operations

O. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. B21, 4L, South Flowable, EC12, EC44, B37, etc.). These materials are brought to the facility, stored, maintained, and then packaged (containers, drums) or loaded into tankers or railcars and transferred to another process or off site.

P. The amount of VOC-containing material for the bulk terminal operations that is stored in the tanks in buildings 21, 25, 26 and 27 shall not exceed 20.0 Million Gallons per rolling twelve-month period.

(1) The permittee shall maintain the following monthly records for all VOC-containing material for the bulk terminal operations that are stored in the tanks in buildings 21, 25, 26 and 27:

(a) The identification of each VOC-containing material stored;
(b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
(c) the amount of VOC-containing material stored;
(d) the twelve month total rolling total of VOC-containing material process stored.

Q. The product of the true vapor pressure and the molecular weight of each VOC-containing material stored in the B21 storage tanks for packaging and bulk terminal operations shall be less than 25.0 psia · lb/lb · mol.

(1) The facility shall document the product of the true vapor pressure and the molecular
weight of each VOC-containing material stored in the B21 storage tanks for packaging and bulk terminal operations.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

40 CFR 63 Subpart FFFF

567 IAC 23.1(4)"cf"

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

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<th>EP ID</th>
<th>Stack Height, Feet</th>
<th>Discharge Style</th>
<th>Stack Opening, inches</th>
<th>Stack Temperature, °F</th>
<th>Exhaust Flowrate, SCFM</th>
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</table>

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?  Yes ☐ No ☑

Facility Maintained Operation & Maintenance Plan Required?  Yes ☐ No ☑

Compliance Assurance Monitoring (CAM) Plan Required?  Yes ☐ No ☑

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Number: Building 21, 25, 26, 27 Equipment Leaks

 Associated Equipment

<table>
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<tr>
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<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
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Raw Material/Fuel: Herbicide

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.

   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials handled in the Building 21 (B21), Building 25 (B25), Building 26 (B26), and Building 27 (B27) equipment leak components, the owner or operator shall record and document the material handled and the origins of the material (i.e. specific processing line, bulk terminal materials, etc.).
(1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials handled in the B21, B25, B26, and B27 equipment leak components.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

D. The equipment leak components used in the B21 tank farm and the associated loadouts used for Bulk Transfer Operations shall have a maximum of 293 heavy liquid valves, 10 heavy liquid pumps, 1348 heavy liquid connectors, and 10 sample connections. The process shall not use any light liquid components, gas valves, compressors, open-ended lines, agitators or pressure relief valves that are in VOC service. This shall include all of the equipment leak components used in the B21 tank farm and the associated loadouts to handle any VOC-containing material for the Bulk Transfer Operations.

(1) The owner or operator shall document the number of each type equipment leak component used in B21 tank farm and the associated loadouts used for Bulk Transfer Operations. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1020, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

E. The equipment leak components used in the B21 Process Area shall have a maximum of 181 heavy liquid valves, 41 light liquid valves, 25 heavy liquid pumps, 3 light liquid pumps, 1204 heavy liquid connectors, 204 light liquid connectors, 39 sample connections. The process shall not use any gas valves, compressors, open-ended lines, pressure relief valves, or agitators that are in VOC service. This shall include all of the equipment leak components used in the B21 Process Area to handle any VOC-containing material.

(1) The owner or operator shall document the number of each type equipment leak component used in B21 Process Area. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1020, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

F. The equipment leak components used in the B25 tank farm and the associated loadouts
used for Bulk Transfer Operations shall have a maximum of 164 heavy liquid valves, 6 heavy liquid pumps, 692 heavy liquid connectors, 5 sample connections. The process shall not use any light liquid components, gas valves, compressors, open-ended lines, agitators or pressure relief valves that are in VOC service. This shall include all of the equipment leak components used in the B25 tank farm and the associated loadouts to handle any VOC-containing material.

(1) The owner or operator shall document the number of each type equipment leak component used in B25 tank farm and the associated loadouts used for Bulk Transfer Operations. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1020, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

G. The equipment leak components used in the B26 tank farm and the associated loadouts used for Bulk Transfer Operations shall have a maximum of 311 valves, 15 pumps, 1173 connectors, and 6 sample connections. The process shall not use any gas valves, compressors, agitators, open-ended lines, or pressure relief valves that are in VOC service. This shall include all of the equipment leak components used in the B26 tank farm and the associated loadouts to handle any VOC-containing material.

(1) The owner or operator shall document the number of each type equipment leak component used in B26 tank farm and the associated loadouts used for Bulk Transfer Operations. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1020, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

H. The equipment leak components used in the B26 tank farm and the associated loadouts for the materials used or produced in the EC12 processing lines shall have a maximum of 40 heavy liquid valves, 1 heavy liquid pumps, 165 heavy liquid connectors, and 1 sample connection. The process shall not use any light liquid components, gas valves, compressors, agitators, open-ended lines, or pressure relief valves that are in VOC service. This shall include all of the equipment leak components used in the B21 tank farm and the associated loadouts to handle any VOC-containing material.

(1) The owner or operator shall document the number of each type equipment leak component used in storage tanks and loadouts associated with the products produced in the EC12 processing lines. Components include but are not limited to valves,
The equipment leak components used in the B27 tank farm and the associated loadouts used for Bulk Transfer Operations shall have a maximum of 254 heavy liquid valves, 10 heavy liquid pumps, 1036 heavy liquid connectors, and 8 sample connections. The process shall not use any light liquid components, gas valves, compressors, agitators, open-ended lines, or pressure relief valves that are in VOC service. This shall include all of the equipment leak components used in the B27 tank farm and the associated loadouts to handle any VOC-containing material.

(1) The owner or operator shall document the number of each type equipment leak component used in B27 tank farm and the associated loadouts used for Bulk Transfer Operations. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1020, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

NESHAP Requirements (Building 21 Process Area, EC12 Processing Line)

J. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing—Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

K. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in the referenced subparts F, H, or UU.

(1) The permittee shall document the subpart they are complying with, and meet all of the applicable requirements as specified in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the permittee is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1020 - §63.1039. The facility is allowed to change which subpart they are complying with; however,
the permittee shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed.

L. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in Buildings 21, 25, 26, and 27.  
(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

40 CFR 63 Subpart FFFF

567 IAC 23.1(4)”cf”

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

<table>
<thead>
<tr>
<th>Agency Approved Operation &amp; Maintenance Plan Required?</th>
<th>Yes ☐ No ☒</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
</tbody>
</table>

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Building 21 Loadouts and Packaging

Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B21-LO-1</td>
<td>B21-LO-1</td>
<td>Building 21 Loadout 1</td>
<td>2,500 gallons/hr</td>
<td>None</td>
<td>18-A-349</td>
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<tr>
<td>EP-B21-LO-3</td>
<td>B21-LO-3</td>
<td>Building 21 Loadout 3</td>
<td>2,500 gallons/hr</td>
<td>None</td>
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<tr>
<td>EP-B21-LO-4</td>
<td>B21-LO-4</td>
<td>Building 21 Loadout 4</td>
<td>2,500 gallons/hr</td>
<td>None</td>
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<tr>
<td>EP-B21-LO-5</td>
<td>B21-LO-5</td>
<td>Building 21 Loadout 5</td>
<td>2,500 gallons/hr</td>
<td>None</td>
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<tr>
<td>EP-B21-LO-6</td>
<td>B21-LO-6</td>
<td>Building 21 Loadout 6</td>
<td>2,500 gallons/hr</td>
<td>None</td>
<td>18-A-354</td>
</tr>
<tr>
<td>EP-B21-LO-7</td>
<td>B21-LO-7</td>
<td>Building 21 Loadout 7</td>
<td>2,500 gallons/hr</td>
<td>None</td>
<td>18-A-355</td>
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<tr>
<td>EP-B21-Packaging</td>
<td>B21-Packaging</td>
<td>Building 21 Packaging</td>
<td>500 gallon container</td>
<td>None</td>
<td>18-A-357</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

**Limits for EPs B21-LO-8 and B21-Packaging**

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 21 tons/yr

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

(1) Emission limit apply to B21 Process Area. This limit applies to all of the emission units and emission episodes listed in operational limit section of this permit. Only the loadouts exhausted by EP-B21-LO-8 & EP-B21-Packaging are part of the B21 Process Area and subject to this limit.

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an
orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only loadout materials from the bulk terminal operations (see definition in Condition 5.H) and the B21 Process Area in emission points EP-B21-LO-1 - EP-B21-LO-8, EP-B21-Packaging (henceforth called Building 21 Loadouts). The owner or operator shall only use B21-LO-8 and EP-B21-Packaging to loadout materials from the B21 Process Area.
   (1) For all materials transferred in the Building 21 Loadouts, the owner or operator shall determine and document:
      a) the loadout used;
      b) the VOC-containing material transferred;
      c) the origins of the VOC-containing material (i.e. B21 Process Area, bulk terminal operations, etc.); and
      d) the amount of VOC-containing material transferred.
   (2) For all materials transferred in the Building 21 Loadouts from the B21 Process Area, the owner or operator shall also determine and document:
      a) if the material is produced in an MCPU for NESHAP Subpart FFFF; and
      b) the vapor pressure.
   (3) For all materials transferred in the Building 21 Loadouts from the bulk terminal operations, the owner or operator shall also determine and document:
      a) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of NESHAP Subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
      b) if the material is an organic liquid, as defined in §63.2406.
   (4) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC-containing material transferred in the Building 21 Loadouts.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

**NESHAP Requirements**

D. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.
E. For each loadout covered under this permit, the owner or operator shall determine and document:
   (1) if the loadout is subject to 40 CFR Part 63 Subpart FFFF; and, if subject,:
      a) if it is a transfer rack, per the definition in § 63.2550,
      b) to which miscellaneous organic chemical process unit (MCPU) the transfer rack is
         assigned, using the procedures in § 63.2435(d).
      c) the group status as specified §63.2550.
   (2) if the loadout is subject to 40 CFR Part 63 Subpart EEEE, National Emission
      Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-
      Gasoline). If subject, the owner or operator shall meet all applicable requirements of
      Subpart EEEE.

F. The facility shall analyze all changes in the material transferred, process, formulations, or
   equipment and determine if there is a change in applicability for any NSPS or NESHAP
   subparts for the loadouts in B21.
   (1) The facility shall document all process changes and the results of all NSPS or
       NESHAP determinations made for these changes.

Recordkeeping for the Building 21 Process Area VOC Emission Cap

The following monitoring and recordkeeping requirements shall be used to show compliance
with the VOC emission limit cap in the emission limit section of this permit for the Building
21 Process Area. The VOC emission limit covers VOC emissions from the emission units
listed in the permits for emissions points EP-B21PA-Vent1, EP-B21PA-Pack1, EP-B21PA-
miscellaneous sources related to B21 Process Area production, including emissions from
packaging, laboratory activity, and tank and floor cleaning. The VOC emission limit covers
the following emission episodes from these emission units for the production (formulation
and repackaging) of products made in the Building 21 Process Area:

   Vapor Displacement (Process Tank Material Loading, Bulk Loadout, Vessel/Container
   Filling/Packaging, Process Tank Cleaning)
   Storage Tanks
   Gas Sweep
   Evaporation from Screens and Open Tanks
   Heating
   Solids Handling
   Ancillary Packaging Emissions - Ink Jet & Stenciling
   Laboratory Emissions
   Tank Cleaning Emissions
   Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission
limit cap:
G. For each product produced in the Building 21 Process Area, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product produced (formulated or repackaged) in the Building 21 Process Area.

(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.

(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition G.5. The facility shall document and provide a justification for the value for each input used.

(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Vapor Displacement: Material Loading, Bulk Loadout (Filling), Vessel/Container Filling, Process Tank Cleaning, and Packaging, the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.
d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

H. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition G.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

I. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard and nonstandard batches completed for each product produced.

J. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in emission limit section of this permit:
(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

K. If the 12-month rolling total of the VOC emissions exceeds 16.0 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in Condition 1 of this permit drops below 16.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 16.0 tons, daily recordkeeping will be required per this Condition of this permit.

Conditions for product loadout for the packaging and bulk terminal operations for Building 21

L. Packaging and bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. B21, 4L, South Flowable, EC12, EC44, B37, etc.) for Building 21. These materials are brought to the facility, stored, maintained, and then packaged in containers or drums or loaded into tankers or railcars and transferred to another process or off site.

M. The amount of VOC-containing material for the bulk terminal operations loaded out (transferred) in the buildings 21, 25, 26 and 27 shall not exceed 20.0 Million Gallons per rolling twelve-month period.

(1) The permittee shall maintain the following monthly records for all VOC-containing material for the bulk terminal operations transferred in buildings 21, 25, 26 and 27:
   a) The identification and origins of each VOC-containing material transferred;
   b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;
   c) the amount of VOC-containing material transferred;
   d) the twelve month total rolling total of VOC-containing material transferred.

N. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations loaded out (transferred) in the B21
Loadouts shall be less than 25.0 psia \cdot \text{lb/lb} \cdot \text{mol}.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations transferred in B21 Loadouts.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?** Yes □ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?** Yes □ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes □ No ☒

Authority for Requirement: 567 IAC 22.108(3)
# Emission Point ID Number: Building 21 Process

## Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>CE#</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
<th>Stack Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TK332</td>
<td>Building 21 Process Area Tank 332</td>
<td>8,000 gallons</td>
<td></td>
<td>None</td>
<td>18-A-358</td>
<td>No</td>
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<tr>
<td></td>
<td>TK333</td>
<td>Building 21 Process Area Tank 333</td>
<td>8,000 gallons</td>
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<td></td>
<td>TK334</td>
<td>Building 21 Process Area Tank 334</td>
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<tr>
<td></td>
<td>TK335</td>
<td>Building 21 Process Area Tank 335</td>
<td>8,000 gallons</td>
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<td>TK336</td>
<td>Building 21 Process Area Tank 336</td>
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<td></td>
<td>TK337</td>
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<td></td>
<td>TK338</td>
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<tr>
<td></td>
<td>TK339</td>
<td>Building 21 Process Area Tank 339</td>
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<td></td>
<td>TK340</td>
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<td></td>
<td>TK343</td>
<td>Building 21 Process Area Tank 343</td>
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<td>TK344</td>
<td>Building 21 Process Area Tank 344</td>
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<td>TK345</td>
<td>Building 21 Process Area Tank 345</td>
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<tr>
<td></td>
<td>EP-TK-338-SA</td>
<td>EU-TK-338-SA Building 21 Process Area Tank 338 Solids Addition Port</td>
<td>1.5 tons/hr</td>
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<td>None</td>
<td>19-A-352</td>
<td>No</td>
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<td>EP-TK-345-SA</td>
<td>EU-TK-345-SA Building 21 Process Area Tank 345 Solids Addition Port</td>
<td>1.5 tons/hr</td>
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<td>No</td>
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<tr>
<td></td>
<td>EP-B21PA-Pack 1</td>
<td>EU-B21PA-Pack 1 Building 21 Process Area Packaging 1</td>
<td>20,000 gallons/day</td>
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<td>None</td>
<td>18-A-359</td>
<td>No</td>
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<td>EP-B21PA-Pack 2</td>
<td>EU-B21PA-Pack 2 Building 21 Process Area Packaging 2</td>
<td>20,000 gallons/day</td>
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<td>EP-B21PA-Pack 3</td>
<td>EU-B21PA-Pack 3 Building 21 Process Area Packaging 3</td>
<td>20,000 gallons/day</td>
<td>NA</td>
<td>None</td>
<td>18-A-361</td>
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</table>
Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

The following emission limits shall not be exceeded for EP-B21PA-Vent1:

Pollutant: Opacity
Emission Limit(s): 40%  
Authority for Requirement: 567 IAC 23.3(2)d
DNR Construction Permits Listed in Table: Associated Equipment

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM$_{2.5}$
Emission Limit(s): 0.30 lb/hr
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

Pollutant: PM$_{10}$
Emission Limit(s): 0.64 lb/hr
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.00 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)a
DNR Construction Permits Listed in Table: Associated Equipment

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 21 tons/yr
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

(2) Emission limit applies to B21 Process Area. This limit applies to all of the emission units and emission episodes listed in operational limits of this permit.

The following emission limits shall not be exceeded for EP-TK-338-SA & EP-TK-345-SA:

Pollutant: Opacity
Emission Limit(s): 40%  
Authority for Requirement: 567 IAC 23.3(2)d
DNR Construction Permits Listed in Table: Associated Equipment

(3) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or
operator to promptly investigate the emission unit and make corrections to operations or
equipment associated with the exceedance. If exceedances continue after the corrections, the
Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM$_{2.5}$
Emission Limit(s): 0.08 lb/hr
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

Pollutant: PM$_{10}$
Emission Limit(s): 0.17 lb/hr
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.25 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permits Listed in Table: Associated Equipment

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 21 tons/yr$^{(4)}$
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

(4) Emission limit applies to B21 Process Area. This limit applies to all of the emission units and emission
episodes listed in operational limits of this permit.

The following emission limits shall not be exceeded for EP-B21PA- Pack1, EP-B21PA- Pack2, or
EP-B21PA- Pack3 each:

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 21 tons/yr$^{(5)}$
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

(5) Emission limit applies to B21 Process Area. This limit applies to all of the emission units and emission
episodes listed in operational limits of this permit.

**Operational Limits & Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements
listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and
shall be available for inspection by the Department. Records shall be legible and maintained in an
orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment for the Building 21 Processing Area shall be operated and
maintained according to manufacturer specifications and maintenance schedule.
(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The permittee shall keep all ports and manways on the tanks in a closed position at all times when storing liquid materials other than when adding materials, measuring liquid heights, and cleaning or maintaining the tanks. Materials must be added to the tank in a manner that minimizes emissions.
(1) The owner or operator shall inspect the tanks quarterly to ensure all ports and manways are closed. The facility shall document the results of the inspection.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
(1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

Recordkeeping for the Building 21 Process Area VOC Emission Cap

The following monitoring and recordkeeping requirements shall be used to show compliance with the VOC emission limit cap in the emission limit section of this permit for the Building 21 Process Area. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points EP-B21PA-Vent1, EP-B21PA-Pack1, EP-B21PA-Pack 2, EP-B21-D, EP-B21-H, EP-B21-LO-8, & EP-B21-Packaging, as well as those from miscellaneous sources related to B21 Process Area production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The VOC emission limit covers the following emission episodes from these emission units for the production (formulation and repackaging) of products made in the Building 21 Process Area:

Vapor Displacement (Process Tank Material Loading, Bulk Loadout, Vessel/Container Filling/Packaging, Process Tank Cleaning)
Storage Tanks
Gas Sweep
Evaporation from Screens and Open Tanks
Heating
Solids Handling
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

D. For each product produced in the Building 21 Process Area, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
(1) The permittee shall identify and document each product produced (formulated or repackaged) in the Building 21 Process Area.

(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.

(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition D.5. The facility shall document and provide a justification for the value for each input used.

(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Vapor Displacement: Material Loading, Bulk Loadout (Filling), Vessel/Container Filling, Process Tank Cleaning, and Packaging, the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16,
Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

E. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition D.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

F. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
(2) The daily number of standard and nonstandard batches completed for each product produced.

G. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

H. If the 12-month rolling total of the VOC emissions exceeds 16.0 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in Condition 1 of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit drops below 16.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 16.0 tons, daily recordkeeping will be required per this Condition of this permit.

NSPS and NESHAP Requirements

I. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

J. All batch process vents that are part of the miscellaneous organic chemical process unit for the Building 21 Process Area shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the Building 21 Processing Area and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the Building 21 Process Area) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

(3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525 (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
a. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
b. A record of whether each batch operated was considered a standard batch.
c. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
d. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

K. The material stored in the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 21 Process Area with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall determine and document the group status for the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 21 Process Area, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

L. The facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 21 Process Area, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall determine and document the group status for the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 21 Process Area, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

M. Any wastewater streams that are part of the miscellaneous organic chemical process unit for the Building 21 Process Area shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.
   (1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

N. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

O. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the
Building 21 Process Area.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Emission Point Characteristics**
*The emission point shall conform to the specifications listed below.*

<table>
<thead>
<tr>
<th>EP ID</th>
<th>Stack Height, Feet</th>
<th>Discharge Style</th>
<th>Stack Opening, inches</th>
<th>Stack Temperature, °F</th>
<th>Exhaust Flowrate, SCFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B21PA-Vent1</td>
<td>12</td>
<td>Downward Discharge</td>
<td>6</td>
<td>74</td>
<td>Displacement</td>
</tr>
</tbody>
</table>

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**
Yes ☐ No ❌

**Facility Maintained Operation & Maintenance Plan Required?**
Yes ☐ No ❌

**Compliance Assurance Monitoring (CAM) Plan Required?**
Yes ☐ No ❌

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number:** B24-EL

**Associated Equipment**

**Associated Emission Unit ID Numbers** (if multiple units vent thru this EP): B24-EL

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**Emission Unit vented through this Emission Point:** B24-EL

**Emission Unit Description:** Building 24 Equipment Leaks

**Raw Material/Fuel:** Herbicide

**Rated Capacity:** N/A

**Applicable Requirements**

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

None at this time.

**Authority for Requirement:** DNR Construction Permit 18-A-730

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.

   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials handled in the Building 24 (B24) equipment, the owner or operator shall record and document the material handled and the origins of the material (i.e. B37 processing lines, bulk terminal materials).

   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials handled in the B24 equipment.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
D. The equipment leak components in the B24 tank farm and the associated loadouts shall have a maximum of 372 light and heavy liquid valves, 10 light and heavy liquid pumps, 1574 light and heavy liquid connectors, and 10 sample connections. The process shall not use any gas valves, compressors, open-ended lines, agitators, or pressure relief valves that are in VOC service. This shall include all of the equipment leak components used in the B24 tank farm and the associated loadouts to handle any VOC-containing material.

(1) The owner or operator shall document the number of each type equipment leak component used in B25 tank farm and the associated loadouts used for Bulk Transfer Operations. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1020, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

NESHAP Requirements (B37 Processing Line)

E. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing—Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525. This requirement applies to equipment leaks for tanks used for the B37 processing line.

F. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in in the referenced subparts F, H, or UU.

(1) The permittee shall document the subpart they are complying with, and meet all of the applicable requirements as specified in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the permittee is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1020 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the permittee shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed. This requirement applies to equipment leaks for tanks used for the B37 processing line.

G. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in Building 24.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 18-A-730
**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:  DNR Construction Permit 18-A-730  
40 CFR 63 Subpart FFFF  
567 IAC 23.1(4)”cf”

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?  Yes ☐  No ☒

Facility Maintained Operation & Maintenance Plan Required?  Yes ☐  No ☒

Compliance Assurance Monitoring (CAM) Plan Required?  Yes ☐  No ☒

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Number: Building 24 Loadouts

Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B24-LO-1</td>
<td>B24-LO-1</td>
<td>Building 24 Loadout 1</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-737</td>
</tr>
<tr>
<td>EP-B24-LO-3</td>
<td>B24-LO-3</td>
<td>Building 24 Loadout 3</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-739</td>
</tr>
<tr>
<td>EP-B24-LO-4</td>
<td>B24-LO-4</td>
<td>Building 24 Loadout 4</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-740</td>
</tr>
<tr>
<td>EP-B24-LO-5</td>
<td>B24-LO-5</td>
<td>Building 24 Loadout 5</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-741</td>
</tr>
<tr>
<td>EP-B24-LO-6</td>
<td>B24-LO-6</td>
<td>Building 24 Loadout 6</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-742</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

None at this time.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.

   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only loadout materials from the bulk terminal operations (see
definition in Condition 5.G) and the B37 processing area in emission points EP-B24-LO-1 through EP-B24-LO-6 (henceforth called Building 24 Loadouts).
(1) For all materials transferred in the Building 24 Loadouts, the owner or operator shall record and document:
   a) the loadout used;
   b) the amount of VOC-containing material transferred:
   c) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
   d) if the material is an organic liquid, as defined in §63.2406
(2) For all materials transferred in the Building 24 Loadouts from the B37 processing line, the owner or operator shall record and document:
   e) if the material is produced in an MCPU for NESHAP Subpart FFFF; and
   f) the vapor pressure, in kPa.
(3) For all materials transferred in the Building 24 Loadouts from the bulk terminal operations, the owner or operator shall record and document:
   g) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
   h) if the material is an organic liquid, as defined in §63.2406.
(4) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC-containing material transferred in the Building 24 Loadouts.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

NSPS and NESHAP Requirements
D. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

E. For each loadout covered under this permit, the owner or operator shall determine and document:
   (1) if the loadout is subject to 40 CFR Part 63 Subpart FFFF; and, if subject,:
      i) if it is a transfer rack, per the definition in § 63.2550,
      j) to which miscellaneous organic chemical process unit (MCPU) the transfer rack is assigned, using the procedures in § 63.2435(d).
      k) the group status, as defined §63.2550.
   (2) if the loadout is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

F. The facility shall analyze all changes in the material transferred, process, formulations, or
equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the loadouts in B24.
(3) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for product loadout for the bulk terminal operations for Building 24

G. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. B21, 4L, South Flowable, EC12, EC44, B37, etc.) for Building 24. These materials are brought to the facility, stored, maintained, and then packaged in containers or drums or loaded into tankers or railcars and transferred to another process or off site.

H. The amount of VOC-containing material for the packaging and bulk terminal operations loaded out (transferred) in the B24 Loadouts shall not exceed 20.0 Million Gallons per rolling twelve-month period.
(1) The permittee shall maintain the following monthly records for all VOC-containing material for the packaging and bulk terminal operations transferred in Building 24 (B24):
   a) The identification and origins of each VOC-containing material transferred;
   b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;
   c) the amount of VOC-containing material transferred;
   d) the twelve month total rolling total of VOC-containing material transferred.

I. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations loaded out (transferred) in the B24 Loadouts shall be less than 40.0 psia · lb/lb · mol.
(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations transferred in B24 Loadouts.

Conditions for product loadout for the B37 processing line

J. The amount of VOC-containing material from or for the B37 processing line that is loaded out (transferred) in the Building 24 Loadouts shall not exceed 15.0 Million Gallons per rolling twelve-month period.
(1) The permittee shall maintain the following monthly records for all VOC-containing material from or for the B37 process that loaded out (transferred) in the Building 24 Loadouts:
   a) The identification and origins of each VOC-containing material transferred;
   b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;
   c) the amount of VOC-containing material loaded out (transferred);
   d) the twelve month total rolling total of VOC-containing material loaded out (transferred).

K. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the B37 processing line loaded out (transferred) in the B24 Loadouts shall be
less than 40.0 psia \cdot lb/lb \cdot mol.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the B37 processing line loaded out (transferred) in the B24 Loadouts.

Authority for Requirement:  DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:  DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

<table>
<thead>
<tr>
<th>Agency Approved Operation &amp; Maintenance Plan Required?</th>
<th>Yes ☐ No ☒</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
</tbody>
</table>

Authority for Requirement:  567 IAC 22.108(3)
**Emission Point ID Number: Building 24 Storage Tank Vents**

**Associated Equipment**

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B24-Vent1</td>
<td>TK180-TK186</td>
<td>Building 24 Storage Tank 180 through Building 24 Storage Tank 186</td>
<td>27,852 gallons per storage tank</td>
<td>None</td>
<td>18-A-731</td>
</tr>
<tr>
<td>EP-B24-Vent3</td>
<td>TK194-TK200</td>
<td>Building 24 Storage Tank 194 through Building 24 Storage Tank 200</td>
<td>27,852 gallons per storage tank</td>
<td>None</td>
<td>18-A-733</td>
</tr>
<tr>
<td>EP-B24-Vent4</td>
<td>TK201-TK207</td>
<td>Building 24 Storage Tank 201 through Building 24 Storage Tank 207</td>
<td>27,852 gallons per storage tank</td>
<td>None</td>
<td>18-A-734</td>
</tr>
<tr>
<td>EP-B24-Vent5</td>
<td>TK208-TK214</td>
<td>Building 24 Storage Tank 208 through Building 24 Storage Tank 214</td>
<td>27,852 gallons per storage tank</td>
<td>None</td>
<td>18-A-735</td>
</tr>
<tr>
<td>EP-B24-Vent6</td>
<td>TK215-TK221</td>
<td>Building 24 Storage Tank 215 through Building 24 Storage Tank 221</td>
<td>27,852 gallons per storage tank</td>
<td>None</td>
<td>18-A-736</td>
</tr>
</tbody>
</table>

**Raw Material/Fuel:** Herbicide

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

None at this time.

**Authority for Requirement:** DNR Construction Permits Listed in Table: Associated Equipment
Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the equipment for this process.

B. The owner or operator shall only store materials from the bulk terminal operations (see definition in Condition 5.J) and the B37 processing line in B24 tank farm.
   (1) For all materials stored in the B24 tank farm, the owner or operator shall determine and document:
       a) the tank used;
       b) the VOC-containing material stored;
       c) the origins of the VOC-containing material (i.e. B37 processing line, bulk terminal operations); and
       d) the amount of VOC-containing material stored.
   (2) For all materials stored in the Building 24 Tank Farm from the B37 processing line, the owner or operator shall also determine and document:
       a) if the material is produced in an MCPU for NESHAP Subpart FFFF; and
       b) the maximum true vapor pressure, in kPa.
   (3) For all materials stored in the Building 24 Tank Farm from the bulk terminal operations, the owner or operator shall also determine and document:
       a) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of NESHAP Subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
       b) if the material is an organic liquid, as defined in §63.2406.
   (4) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the B24 storage tanks.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

NSPS and NESHAP Requirements

D. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL), as defined in 40 CFR Part 51.100, stored in the bulk storage tanks in B24 shall be less than 15.0 kPa.
(1) The facility shall keep readily accessible records showing the dimensions and capacity for the bulk storage tanks in B24.
(2) The facility shall document the maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL) stored in the bulk storage tanks in B24.
(3) The facility shall notify the Administrator within 30 days if the maximum true vapor pressure of the liquids stored in the bulk storage tanks in B24 exceeds 15.0 kPa.

E. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

F. For each storage tank covered under this permit, the owner or operator shall determine and document if the storage tank is subject to 40 CFR Part 63 Subpart FFFF, and, if subject, to which miscellaneous organic chemical process unit (MCPU) the tank is assigned, using the procedures in § 63.2435 (d), if applicable.

G. The material stored in the bulk storage tanks in B24 that are part of a miscellaneous organic chemical process unit, and with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.
(1) The owner or operator shall determine and document the maximum true vapor pressure of each material stored and the group status for each storage tanks that is part of a miscellaneous organic chemical process unit in the B24 Tank Farm, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

H. For each tank covered under this permit, the owner or operator shall determine and document if the tank is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

I. The facility shall analyze all changes in material stored in any applicable storage tank and determine if there is a change in applicability for any NSPS or NESHAP subparts.
(1) The facility shall document all changes in the contents of any tank and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for storing materials for bulk terminal operations

J. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. B21, 4L, South Flowable, EC12, EC44, B37, etc.). These materials are brought to the facility, stored, maintained, and then packaged (containers, drums) or loaded into tankers...
or railcars and transferred to another process or off site.

K. The amount of VOC-containing material for the packaging and bulk terminal that is loaded in and loaded out of the tanks in B24 tank farm shall not exceed a throughput of 15.0 Million Gallons per rolling twelve-month period.

(1) The permittee shall maintain the following monthly records for all VOC-containing material for the packaging and bulk terminal operations that is stored in the tanks in B24 tank farm:
   e) The identification and origins of each VOC-containing material;
   f) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
   g) the amount of VOC-containing material stored;
   h) the twelve month total rolling total of VOC-containing material process stored.

L. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations that is stored in the tanks in B24 tank farm shall be less than 40.0 psia ∙ lb/lb ∙ mol.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations stored in the tanks in B24 tank farm.

Conditions for storing materials for the B37 processing line

M. The amount of VOC-containing material from or for the B37 processing line that is loaded in and loaded out of the tanks in B24 tank farm shall not exceed a throughput of 15.0 Million Gallons per rolling twelve-month period.

(1) The permittee shall maintain the following monthly records for all VOC-containing material from or for the B37 process that is stored in the tanks in B24 tank farm:
   a) The identification of each VOC-containing material stored;
   b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
   c) the amount of VOC-containing material stored;
   d) the twelve month total rolling total of VOC-containing material stored.

N. The product of the true vapor pressure and the molecular weight of each VOC-containing material from or for the B37 process that is stored in the tanks in B24 tank farm shall be less than 40.0 psia ∙ lb/lb ∙ mol.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material from or for the B37 process stored in the tanks in B24 tank farm.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment
NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

<table>
<thead>
<tr>
<th>EP ID</th>
<th>Stack Height, Feet</th>
<th>Discharge Style</th>
<th>Stack Opening, inches</th>
<th>Stack Temperature, °F</th>
<th>Exhaust Flowrate, SCFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B24-Vent1</td>
<td>11</td>
<td>Downward with Screen over Opening</td>
<td>10</td>
<td>Ambient</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B24-Vent2</td>
<td>11</td>
<td>Downward with Screen over Opening</td>
<td>10</td>
<td>Ambient</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B24-Vent3</td>
<td>11</td>
<td>Downward with Screen over Opening</td>
<td>10</td>
<td>Ambient</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B24-Vent4</td>
<td>11</td>
<td>Downward with Screen over Opening</td>
<td>10</td>
<td>Ambient</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B24-Vent5</td>
<td>11</td>
<td>Downward with Screen over Opening</td>
<td>10</td>
<td>Ambient</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B24-Vent6</td>
<td>11</td>
<td>Downward with Screen over Opening</td>
<td>10</td>
<td>Ambient</td>
<td>Displacement</td>
</tr>
</tbody>
</table>

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
### Emission Point ID Number: Building 25 Storage Tanks

#### Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B25-W</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TK222</td>
<td></td>
<td>Building 25 Storage Tank 222</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TK223</td>
<td></td>
<td>Building 25 Storage Tank 223</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TK224</td>
<td></td>
<td>Building 25 Storage Tank 224</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TK225</td>
<td></td>
<td>Building 25 Storage Tank 225</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TK226</td>
<td></td>
<td>Building 25 Storage Tank 226</td>
<td>27,583 gallons</td>
<td>None</td>
<td>18-A-307-S1</td>
</tr>
<tr>
<td>TK227</td>
<td></td>
<td>Building 25 Storage Tank 227</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TK228</td>
<td></td>
<td>Building 25 Storage Tank 228</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TK229</td>
<td></td>
<td>Building 25 Storage Tank 229</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TK230</td>
<td></td>
<td>Building 25 Storage Tank 230</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TK231</td>
<td></td>
<td>Building 25 Storage Tank 231</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TK232</td>
<td></td>
<td>Building 25 Storage Tank 232</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TK233</td>
<td></td>
<td>Building 25 Storage Tank 233</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TK234</td>
<td></td>
<td>Building 25 Storage Tank 234</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TK235</td>
<td></td>
<td>Building 25 Storage Tank 235</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TK236</td>
<td></td>
<td>Building 25 Storage Tank 236</td>
<td>27,583 gallons</td>
<td>None</td>
<td>18-A-308-S1</td>
</tr>
<tr>
<td>TK237</td>
<td></td>
<td>Building 25 Storage Tank 237</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TK238</td>
<td></td>
<td>Building 25 Storage Tank 238</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TK239</td>
<td></td>
<td>Building 25 Storage Tank 239</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TK240</td>
<td></td>
<td>Building 25 Storage Tank 240</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TK241</td>
<td></td>
<td>Building 25 Storage Tank 241</td>
<td>27,583 gallons</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

**Raw Material/Fuel:** Herbicide
Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**  
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Operational Limits & Requirements**  
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only store materials from the bulk terminal operations (see definition in Condition 5.G) in the B25 tank farm.
   (1) For all materials stored in the Building 25 tank farm, the owner or operator shall determine and document:
      a) the tank used;
      b) the VOC-containing material stored,
      c) the amount of VOC-containing material stored.
      d) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
      e) if the material is an organic liquid, as defined in §63.2406.

   (2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the B25 tank farm.

C. The permittee shall keep all ports and manways on the tanks in a closed position at all times when storing liquid materials other than when adding materials, measuring liquid heights, and cleaning or maintaining the tanks. Materials must be added to the tank in a manner that minimizes emissions.
   (1) The owner or operator shall inspect the tanks quarterly to ensure all ports and manways are closed. The facility shall document the results of the inspection.
D. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

NSPS and NESHAP Requirements

E. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL), as defined in 40 CFR Part 51.100, stored in the bulk storage tanks in B25 shall be less than 15.0 kPa.
   (1) The facility shall keep readily accessible records showing the dimensions and capacity for the bulk storage tanks in B25.
   (2) The facility shall document the maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL) stored in the bulk storage tanks in B25.
   (3) The facility shall notify the Administrator within 30 days if the maximum true vapor pressure of the liquids stored in the bulk storage tanks in B25 exceeds 15.0 kPa.

F. For each tank covered under this permit, the owner or operator shall determine and document if the tank is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

G. The facility shall analyze all changes in material stored in any applicable storage tank and determine if there is a change in applicability for any NSPS or NESHAP subparts.
   (1) The facility shall document all changes in the contents of any tank and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for storing materials for bulk terminal operations

H. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. B21, 4L, South Flowable, EC12, EC44, B37, etc.). These materials are brought to the facility, stored, maintained, and then packaged (containers, drums) or loaded into tankers or railcars and transferred to another process or off site.

I. The amount of VOC-containing material for the bulk terminal operations that is stored in the tanks in buildings 21, 25, 26 and 27 shall not exceed 20.0 Million Gallons per rolling twelve-month period.
   (1) The permittee shall maintain the following monthly records for all VOC-containing material for the bulk terminal operations that are stored in the tanks in buildings 21, 25, 26 and 27:
      a) The identification of each VOC-containing material stored;
      b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
      c) the amount of VOC-containing material stored;
      d) the twelve month total rolling total of VOC-containing material process stored.
J. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations that is stored in the tanks in B25 tank farm shall be less than 25.0 psia \cdot \text{lb/lb \cdot mol}.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations stored in the tanks in B25 tank farm.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

<table>
<thead>
<tr>
<th>EP ID</th>
<th>Stack Height, Feet</th>
<th>Discharge Style</th>
<th>Stack Opening, inches</th>
<th>Stack Temperature, °F</th>
<th>Exhaust Flowrate, SCFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B25-E</td>
<td>9.0</td>
<td>Downward</td>
<td>10</td>
<td>74</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B25-W</td>
<td>10.5</td>
<td>Downward</td>
<td>10</td>
<td>74</td>
<td>Displacement</td>
</tr>
</tbody>
</table>

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

- **Agency Approved Operation & Maintenance Plan Required?** Yes [ ] No [x]
- **Facility Maintained Operation & Maintenance Plan Required?** Yes [ ] No [x]
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes [ ] No [x]

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Building 25 Loadouts and Packaging

Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

None at this time.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

   (1) For all materials transferred in the Building 25 Loadouts, the owner or operator shall
determine and document:

a) the loadout used;
b) the VOC-containing material transferred,
c) the amount of VOC-containing material transferred.
d) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
e) if the material is an organic liquid, as defined in §63.2406.

(2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials transferred in the Building 25 Loadouts.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

NSPS and NESHAP Requirements

D. For each loadout covered under this permit, the owner or operator shall determine and document if the loadout is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

E. The facility shall analyze all changes in the material transferred, process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the loadouts in B25.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for product loadout for the bulk terminal operations for Building 25

F. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. B21, 4L, South Flowable, EC12, EC44, B37, etc.). These materials are brought to the facility, stored, maintained, and then packaged in containers or drums or loaded into tankers or railcars and transferred to another process or off site.

G. The amount of VOC-containing material for the bulk terminal operations loaded out (transferred) in the buildings 21, 25, 26 and 27 shall not exceed 20.0 Million Gallons per rolling twelve-month period.

(1) The permittee shall maintain the following monthly records for all VOC-containing material for the bulk terminal operations transferred in buildings 21, 25, 26 and 27:

a) The identification and origins of each VOC-containing material transferred;
b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;
c) the amount of VOC-containing material transferred;
d) the twelve month total rolling total of VOC-containing material transferred.

H. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations loaded out (transferred) in the Building 25
Loadouts shall be less than 25.0 psia \cdot \text{lb/lb} \cdot \text{mol}.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations transferred in Building 25 Loadouts.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
## Emission Point ID Number: Building 26 Storage Tanks

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TK242</td>
<td>Building 26 Storage Tank242</td>
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<tr>
<td></td>
<td>TK243</td>
<td>Building 26 Storage Tank243</td>
<td>29,891 gallons</td>
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<td></td>
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<tr>
<td></td>
<td>TK244</td>
<td>Building 26 Storage Tank244</td>
<td>29,891 gallons</td>
<td>None</td>
<td></td>
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<tr>
<td></td>
<td>TK245</td>
<td>Building 26 Storage Tank245</td>
<td>29,891 gallons</td>
<td>None</td>
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<tr>
<td></td>
<td>TK246</td>
<td>Building 26 Storage Tank246</td>
<td>29,891 gallons</td>
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<tr>
<td></td>
<td>TK247</td>
<td>Building 26 Storage Tank247</td>
<td>29,891 gallons</td>
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<tr>
<td></td>
<td>TK248</td>
<td>Building 26 Storage Tank248</td>
<td>29,891 gallons</td>
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<tr>
<td></td>
<td>TK249</td>
<td>Building 26 Storage Tank249</td>
<td>29,891 gallons</td>
<td>None</td>
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<tr>
<td></td>
<td>TK250</td>
<td>Building 26 Storage Tank250</td>
<td>29,891 gallons</td>
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<td></td>
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<tr>
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<td>TK251</td>
<td>Building 26 Storage Tank251</td>
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<td>None</td>
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<tr>
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<td>TK252</td>
<td>Building 26 Storage Tank252</td>
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<td></td>
<td>TK253</td>
<td>Building 26 Storage Tank253</td>
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<td>TK254</td>
<td>Building 26 Storage Tank254</td>
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<td>TK255</td>
<td>Building 26 Storage Tank255</td>
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<td>TK256</td>
<td>Building 26 Storage Tank256</td>
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<td>TK257</td>
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<td></td>
<td>TK258</td>
<td>Building 26 Storage Tank258</td>
<td>27,702 gallons</td>
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<td>TK259</td>
<td>Building 26 Storage Tank259</td>
<td>27,702 gallons</td>
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<td>TK260</td>
<td>Building 26 Storage Tank260</td>
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<tr>
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<td>TK261</td>
<td>Building 26 Storage Tank261</td>
<td>29,891 gallons</td>
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<td></td>
<td>TK262</td>
<td>Building 26 Storage Tank262</td>
<td>29,891 gallons</td>
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<tr>
<td></td>
<td>TK263</td>
<td>Building 26 Storage Tank263</td>
<td>29,891 gallons</td>
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<td></td>
<td>TK264</td>
<td>Building 26 Storage Tank264</td>
<td>29,891 gallons</td>
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<td></td>
<td>TK265</td>
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<tr>
<td>TK266</td>
<td>Building 26 Storage Tank266</td>
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<td></td>
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<td>TK267</td>
<td>Building 26 Storage Tank267</td>
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<td>TK269</td>
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<td>TK270</td>
<td>Building 26 Storage Tank270</td>
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<td></td>
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<tr>
<td>TK271</td>
<td>Building 26 Storage Tank271</td>
<td>29,891 gallons</td>
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<td>TK272</td>
<td>Building 26 Storage Tank272</td>
<td>29,891 gallons</td>
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<td>TK273</td>
<td>Building 26 Storage Tank273</td>
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<td>TK274</td>
<td>Building 26 Storage Tank274</td>
<td>29,891 gallons</td>
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<td>TK275</td>
<td>Building 26 Storage Tank275</td>
<td>29,891 gallons</td>
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<td>TK276</td>
<td>Building 26 Storage Tank276</td>
<td>29,891 gallons</td>
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<td>TK277</td>
<td>Building 26 Storage Tank277</td>
<td>29,891 gallons</td>
<td>None</td>
<td></td>
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</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

None at this time.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.

(1) The owner or operator shall keep a record of all inspections and maintenance and any
actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only store materials from the bulk terminal operations (see definition in Condition 5.J) and the EC12 processing line in B26 tank farm. The owner or operator shall only use tanks TK242 and TK243 to store materials from the EC12 processing line.

(1) For all materials stored in the B26 tank farm, the owner or operator shall determine and document:
   a) the tank used;
   b) the VOC-containing material transferred;
   c) the origins of the VOC-containing material (i.e. EC12 processing line, bulk terminal operations); and
   d) the amount of VOC-containing material stored.

(2) For all materials stored in the Building 26 Tank Farm from the EC12 processing line, the owner or operator shall also determine and document:
   a) if the material is produced in an MCPU for NESHAP Subpart FFFF; and
   b) the maximum true vapor pressure.

(3) For all materials stored in the Building 26 Tank Farm from the bulk terminal operations, the owner or operator shall also determine and document:
   a) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of NESHAP Subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
   b) if the material is an organic liquid, as defined in §63.2406.

(4) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the B26 storage tanks.

C. The permittee shall keep all ports and manways on the tanks in a closed position at all times when storing liquid materials other than when adding materials, measuring liquid heights, and cleaning or maintaining the tanks. Materials must be added to the tank in a manner that minimizes emissions.

(1) The owner or operator shall inspect the tanks quarterly to ensure all ports and manways are closed. The facility shall document the results of the inspection.

D. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

(1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

**NSPS and NESHAP Requirements**

E. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL), as defined in 40 CFR Part 51.100, stored in the bulk storage tanks in B26 shall be less than 15.0 kPa.

(1) The facility shall keep readily accessible records showing the dimensions and
capacity for the bulk storage tanks in B26.

(2) The facility shall document the maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL) stored in the bulk storage tanks in B26.

(3) The facility shall notify the Administrator within 30 days if the maximum true vapor pressure of the liquids stored in the bulk storage tanks in B26 exceeds 15.0 kPa.

F. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

G. For each storage tank covered under this permit, the owner or operator shall determine and document if the storage tank is subject to 40 CFR Part 63 Subpart FFFF, and, if subject, to which miscellaneous organic chemical process unit (MCPU) the tank is assigned, using the procedures in § 63.2435 (d), if applicable.

H. The material stored in the bulk storage tanks in B26 that are part of a miscellaneous organic chemical process unit, and with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the maximum true vapor pressure of each material stored and the group status for each storage tanks that is part of a miscellaneous organic chemical process unit in the B26 Tank Farm, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

I. For each tank covered under this permit, the owner or operator shall determine and document if the tank is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

J. The facility shall analyze all changes in material stored in any applicable storage tank and determine if there is a change in applicability for any NSPS or NESHAP subparts.

(1) The facility shall document all changes in the contents of any tank and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for storing materials for bulk terminal operations

K. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. EC12, B21, 4L, South Flowable, EC44, B37, etc.). These materials are brought to the facility, stored, maintained, and then packaged (containers, drums) or loaded into tankers or railcars and transferred to another process or off site.
L. The amount of VOC-containing material for the bulk terminal operations that is stored in the tanks in buildings 21, 25, 26 and 27 shall not exceed 20.0 Million Gallons per rolling twelve-month period.
(1) The permittee shall maintain the following monthly records for all VOC-containing material for the bulk terminal operations that are stored in the tanks in buildings 21, 25, 26 and 27:
   e) The identification of each VOC-containing material stored;
   f) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
   g) the amount of VOC-containing material stored;
   h) the twelve month total rolling total of VOC-containing material process stored.

M. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations that is stored in the tanks in B26 tank farm shall be less than 25.0 psia \( \cdot \) lb/lb \( \cdot \) mol.
(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations stored in the tanks in B26 tank farm.

Conditions for storing materials for the EC12 processing line

N. The amount of VOC-containing material from or for the EC12 processing line that is stored in the tanks in B26 tank farm shall not exceed 25.0 Million Gallons per rolling twelve-month period.
(1) The permittee shall maintain the following monthly records for all VOC-containing material from or for the EC12 process that is stored in the tanks in B26 tank farm:
   e) The identification of each VOC-containing material stored;
   f) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
   g) the amount of VOC-containing material stored;
   h) the twelve month total rolling total of VOC-containing material process stored.

O. The product of the true vapor pressure and the molecular weight of each VOC-containing material from or for the EC12 process that is stored in the tanks in B26 tank farm shall be less than 10.0 psia \( \cdot \) lb/lb \( \cdot \) mol.
(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material from or for the EC12 process stored in the tanks in B26 tank farm.

Authority for Requirement:  DNR Construction Permits Listed in Table: Associated Equipment

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:  DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

<table>
<thead>
<tr>
<th>EP ID</th>
<th>Stack Height, Feet</th>
<th>Discharge Style</th>
<th>Stack Opening, inches</th>
<th>Stack Temperature, °F</th>
<th>Exhaust Flowrate, SCFM</th>
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</thead>
<tbody>
<tr>
<td>EP-B26-W</td>
<td>10.5</td>
<td>Downward</td>
<td>10</td>
<td>74</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B26-E</td>
<td>11</td>
<td>Downward</td>
<td>10</td>
<td>74</td>
<td>Displacement</td>
</tr>
</tbody>
</table>

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

- **Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
## Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B26-LO-1</td>
<td>B26-LO-1</td>
<td>Building 26 Loadout 1</td>
<td>2,500 gallons/hr</td>
<td>None</td>
<td>18-A-316</td>
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<tr>
<td>EP-B26-LO-3</td>
<td>B26-LO-3</td>
<td>Building 26 Loadout 3</td>
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<td>18-A-318</td>
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<tr>
<td>EP-B26-LO-4</td>
<td>B26-LO-4</td>
<td>Building 26 Loadout 4</td>
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<td>EP-B26-LO-5</td>
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<td>Building 26 Loadout 5</td>
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<td>Building 26 Loadout 7</td>
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<td>EP-B26-LO-8</td>
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<td>Building 26 Loadout 8</td>
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<td>EP-B26-Packaging 1</td>
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<td>Building 26 Packaging 1</td>
<td>400 gallon container</td>
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<td>18-A-322</td>
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### Raw Material/Fuel: Herbicide

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR

**Operational Limits & Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:
General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only loadout materials from the bulk terminal operations (see definition in Condition 5.G) and the EC12 processing area in emission points EP-B26-LO-1 - EP-B26-LO-6, EP-B26-Packaging 1, and EP-B26-Packaging 2 (henceforth called Building 26 Loadouts). The owner or operator shall only use EP-B26-Packaging1 and EP-B26-Packaging 2 to loadout materials from the EC12 processing line.
   (1) For all materials transferred in the Building 26 Loadouts, the owner or operator shall record and document:
      a) the loadout used;
      b) the VOC-containing material transferred,
      c) the origins of the VOC-containing material (i.e. EC12 processing line, bulk terminal operations, etc.); and
      d) the amount of VOC-containing material transferred.
   (2) For all materials transferred in the Building 26 Loadouts from the EC12 processing line, the owner or operator shall record and document:
      a) if the material is produced in an MCPU for NESHAP Subpart FFFF; and
      b) the vapor pressure.
   (3) For all materials transferred in the Building 26 Loadouts from the bulk terminal operations, the owner or operator shall record and document:
      a) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
      b) if the material is an organic liquid, as defined in §63.2406.
   (4) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC-containing material transferred in the Building 26 Loadouts.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

NESHAP Requirements

D. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

E. For each loadout covered under this permit, the owner or operator shall determine and document:
   (1) if the loadout is subject to 40 CFR Part 63 Subpart FFFF; and, if subject,:
      c) if it is a transfer rack, per the definition in § 63.2550,
d) to which miscellaneous organic chemical process unit (MCPU) the transfer rack is assigned, using the procedures in § 63.2435(d).
e) the group status, as defined §63.2550.

(2) if the loadout is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

F. The facility shall analyze all changes in the material transferred, process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the loadouts in B26.
   (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for product loadout for the bulk terminal operations for Building 26

G. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. EC12, B21, 4L, South Flowable, EC44, B37, etc.) for Building 26. These materials are brought to the facility, stored, maintained, and then packaged in containers or drums or loaded into tankers or railcars and transferred to another process or off site.

H. The amount of VOC-containing material for the bulk terminal operations loaded out (transferred) in the buildings 21, 25, 26 and 27 shall not exceed 20.0 Million Gallons per rolling twelve-month period.
   (1) The permittee shall maintain the following monthly records for all VOC-containing material for the bulk terminal operations transferred in buildings 21, 25, 26 and 27:
      a) The identification and origins of each VOC-containing material transferred;
      b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;
      c) the amount of VOC-containing material transferred;
      d) the twelve month total rolling total of VOC-containing material transferred.

I. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations loaded out (transferred) in the Building 26 Loadouts shall be less than 25.0 psia · lb/lb · mol.
   (1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations transferred in Building 26 Loadouts.

Conditions for product loadout for the EC12 processing line

J. The amount of VOC-containing material from or for the EC12 processing line that is loaded out (transferred) in the Building 26 Loadouts shall not exceed 25.0 Million Gallons per rolling twelve-month period.
   (1) The permittee shall maintain the following monthly records for all VOC-containing
material from or for the EC12 process that loaded out (transferred) in the Building 26 Loadouts:

a) The identification and origins of each VOC-containing material transferred;
b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;
c) the amount of VOC-containing material loaded out (transferred);
d) the twelve month total rolling total of VOC-containing material loaded out (transferred).

K. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the EC12 processing line loaded out (transferred) in the B26 Loadouts shall be less than 10.0 psia \cdot \text{lb/lb \cdot mol}.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the EC12 processing line loaded out (transferred) in the B26 Loadouts.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment 40 CFR 63 Subpart FFFF 567 IAC 23.1(4)"cf"

**Monitoring Requirements**
*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

- **Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Building 27 Loadout Tanks and Packaging

Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B27-LO-1</td>
<td>B27-1</td>
<td>Building 27 Loadout 1</td>
<td>2,500 gallons/hr</td>
<td>None</td>
<td>18-A-330</td>
</tr>
<tr>
<td>EP-B27-LO-3</td>
<td>B27-3</td>
<td>Building 27 Loadout 3</td>
<td>2,500 gallons/hr</td>
<td>None</td>
<td>18-A-332</td>
</tr>
<tr>
<td>EP-B27-LO-5</td>
<td>B27-5</td>
<td>Building 27 Loadout 5</td>
<td>2,500 gallons/hr</td>
<td>None</td>
<td>18-A-334</td>
</tr>
<tr>
<td>EP-B27-LO-6</td>
<td>B27-6</td>
<td>Building 27 Loadout 6</td>
<td>2,500 gallons/hr</td>
<td>None</td>
<td>18-A-335</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Operational Limits & Requirements**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**
A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.
B. The owner or operator shall only loadout materials from the bulk terminal operations (see definition in Condition 5.F) in emission points EP-B27-LO-1 - EP-B27-LO-6 and EP-B27-Packaging (henceforth called Building 27 Loadouts).

(1) For all materials transferred in the Building 27 Loadouts, the owner or operator shall determine and document:
   i. the loadout used;
   ii. the VOC-containing material transferred,
   iii. the amount of VOC-containing material transferred.
   iv. the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
   v. if the material is an organic liquid, as defined in §63.2406.

(2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials transferred in the Building 27 Loadouts.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

NSPS and NESHAP Requirements

D. For each loadout covered under this permit, the owner or operator shall determine and document if the loadout is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

E. The facility shall analyze all changes in the material transferred, process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the loadouts in B27.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for product loadout for the bulk terminal operations for Building 27

F. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. EC12, B21, 4L, South Flowable, EC44, B37, etc.). These materials are brought to the facility, stored, maintained, and then packaged in containers or drums or loaded into tankers or railcars and transferred to another process or off site.

G. The amount of VOC-containing material for the bulk terminal operations loaded out (transferred) in the buildings 21, 25, 26 and 27 shall not exceed 20.0 Million Gallons per rolling twelve-month period.

(1) The permittee shall maintain the following monthly records for all VOC-containing material for the bulk terminal operations transferred in buildings 21, 25, 26 and 27:
   a) The identification and origins of each VOC-containing material transferred;
   b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;
c) the amount of VOC-containing material transferred;
d) the twelve month total rolling total of VOC-containing material transferred.

H. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations loaded out (transferred) in the B27 Loadouts shall be less than 25.0 psia \cdot \text{lb/lb} \cdot \text{mol}.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations transferred in B27 Loadouts.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart EEEE National Emission Standards for Hazardous Air Pollutants; Organic Liquids Distribution (Non-gasoline).

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

40 CFR 63 Subpart EEEE

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

Agency Approved Operation & Maintenance Plan Required? Yes \(\square\) No \(\square\)

Facility Maintained Operation & Maintenance Plan Required? Yes \(\square\) No \(\square\)

Compliance Assurance Monitoring (CAM) Plan Required? Yes \(\square\) No \(\square\)

Authority for Requirement: 567 IAC 22.108(3)
## Emission Point ID Number: Building 27 Storage Tanks

### Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>TK278</td>
<td>Building 27 Storage Tank 278</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK279</td>
<td>Building 27 Storage Tank 279</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK280</td>
<td>Building 27 Storage Tank 280</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK281</td>
<td>Building 27 Storage Tank 281</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK282</td>
<td>Building 27 Storage Tank 282</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK283</td>
<td>Building 27 Storage Tank 283</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK284</td>
<td>Building 27 Storage Tank 284</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK285</td>
<td>Building 27 Storage Tank 285</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK286</td>
<td>Building 27 Storage Tank 286</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK287</td>
<td>Building 27 Storage Tank 287</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK288</td>
<td>Building 27 Storage Tank 288</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK289</td>
<td>Building 27 Storage Tank 289</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK290</td>
<td>Building 27 Storage Tank 290</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK291</td>
<td>Building 27 Storage Tank 291</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK292</td>
<td>Building 27 Storage Tank 292</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK293</td>
<td>Building 27 Storage Tank 293</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK294</td>
<td>Building 27 Storage Tank 294</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK295</td>
<td>Building 27 Storage Tank 295</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK296</td>
<td>Building 27 Storage Tank 296</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK297</td>
<td>Building 27 Storage Tank 297</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK298</td>
<td>Building 27 Storage Tank 298</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK299</td>
<td>Building 27 Storage Tank 299</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
<tr>
<td>TK300</td>
<td>Building 27 Storage Tank 300</td>
<td>27,162 gallons</td>
<td>None</td>
<td></td>
<td>18-A-324</td>
</tr>
</tbody>
</table>
Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Operational Limits & Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:
General Operating Limits and Recordkeeping Requirements
A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only store materials from the bulk terminal operations (see definition in Condition 5.G) in the B27 tank farm.
   (1) For all materials stored in the Building 27 tank farm, the owner or operator shall determine and document:
      a) the tank used;
      b) the VOC-containing material stored,
      c) the amount of VOC-containing material stored.
      d) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
      e) if the material is an organic liquid, as defined in §63.2406.
   (2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the B27 tank farm.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (2) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

NSPS and NESHAP Requirements
D. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL), as defined in 40 CFR Part 51.100, stored in the bulk storage tanks in B27 shall be less than 15.0 kPa.
   (1) The facility shall keep readily accessible records showing the dimensions and capacity for the bulk storage tanks in B27.
   (2) The facility shall document the maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL) stored in the bulk storage tanks in B27.
   (3) The facility shall notify the Administrator within 30 days if the maximum true vapor pressure of the liquids stored in the bulk storage tanks in B27 exceeds 15.0 kPa.

E. For each tank covered under this permit, the owner or operator shall determine and document if the tank is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

F. The facility shall analyze all changes in material stored in any applicable storage tank and
determine if there is a change in applicability for any NSPS or NESHAP subparts.
(1) The facility shall document all changes in the contents of any tank and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for storing materials for bulk terminal operations

G. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. EC12, B21, 4L, South Flowable, EC44, B37, etc.). These materials are brought to the facility, stored, maintained, and then packaged (containers, drums) or loaded into tankers or railcars and transferred to another process or off site.

H. The amount of VOC-containing material for the bulk terminal operations that is stored in the tanks in buildings 21, 25, 26 and 27 shall not exceed 20.0 Million Gallons per rolling twelve-month period.
(1) The permittee shall maintain the following monthly records for all VOC-containing material for the bulk terminal operations that are stored in the tanks in buildings 21, 25, 26 and 27:
   a) The identification of each VOC-containing material stored;
   b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
   c) the amount of VOC-containing material stored;
   d) the twelve month total rolling total of VOC-containing material process stored.

I. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations that is stored in the tanks in B27 tank farm shall be less than 25.0 psia ∙ lb/lb ∙ mol.
(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations stored in the tanks in B27 tank farm.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart EEEE National Emission Standards for Hazardous Air Pollutants; Organic Liquids Distribution (Non-gasoline).

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart EEEE
**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

<table>
<thead>
<tr>
<th>EP ID</th>
<th>Stack Height, Feet</th>
<th>Discharge Style</th>
<th>Stack Opening, inches</th>
<th>Stack Temperature, °F</th>
<th>Exhaust Flowrate, SCFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B27-W(S)</td>
<td>13.5</td>
<td>Downward</td>
<td>10</td>
<td>74</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B27-W(N)</td>
<td>13.5</td>
<td>Downward</td>
<td>10</td>
<td>74</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B27-S</td>
<td>13.0</td>
<td>Downward</td>
<td>10</td>
<td>74</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B27-N</td>
<td>13.0</td>
<td>Downward</td>
<td>10</td>
<td>74</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B27-E(N)</td>
<td>13.5</td>
<td>Downward</td>
<td>10</td>
<td>74</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B27-E(S)</td>
<td>13.5</td>
<td>Downward</td>
<td>10</td>
<td>74</td>
<td>Displacement</td>
</tr>
</tbody>
</table>

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

<table>
<thead>
<tr>
<th>Agency Approved Operation &amp; Maintenance Plan Required?</th>
<th>Yes ☐ No ☒</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
</tbody>
</table>

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Building 28 Storage Tanks

Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: None at this time.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Operational Limits & Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only store materials from the bulk terminal operations (see definition in Condition 5.J) and the EC12 processing line in B28 tank farm.
   (1) For all materials stored in the B28 tank farm, the owner or operator shall determine
and document:
   a) the tank used;
   b) the VOC-containing material transferred;
   c) the origins of the VOC-containing material (i.e. EC12 processing line, bulk terminal operations); and
   d) the amount of VOC-containing material stored.

(2) For all materials stored in the Building 28 Tank Farm from the EC12 processing line, the owner or operator shall also determine and document:
   a) if the material is produced in an MCPU for NESHAP Subpart FFFF; and
   b) the maximum true vapor pressure.

(3) For all materials stored in the Building 28 Tank Farm from the bulk terminal operations, the owner or operator shall also determine and document:
   a) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of NESHAP Subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
   b) if the material is an organic liquid, as defined in §63.2406.

(4) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the B28 storage tanks.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

NSPS and NESHAP Requirements

D. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL), as defined in 40 CFR Part 51.100, stored in the bulk storage tanks in B28 shall be less than 15.0 kPa.

   (1) The facility shall keep readily accessible records showing the dimensions and capacity for the bulk storage tanks in B28.

   (2) The facility shall document the maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL) stored in the bulk storage tanks in B28.

   (3) The facility shall notify the Administrator within 30 days if the maximum true vapor pressure of the liquids stored in the bulk storage tanks in B28 exceeds 15.0 kPa.

E. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing—Subpart FFFF.

   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

F. For each storage tank covered under this permit, the owner or operator shall determine and document if the storage tank is subject to 40 CFR Part 63 Subpart FFFF, and, if subject, to which miscellaneous organic chemical process unit (MCPU) the tank is assigned, using the procedures in § 63.2435 (d), if applicable.
G. The material stored in the bulk storage tanks in B28 that are part of a miscellaneous organic chemical process unit, and with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) The owner or operator shall determine and document the maximum true vapor pressure of each material stored and the group status for each storage tanks that is part of a miscellaneous organic chemical process unit in the B28 Tank Farm, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

H. For each tank covered under this permit, the owner or operator shall determine and document if the tank is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

I. The facility shall analyze all changes in material stored in any applicable storage tank and determine if there is a change in applicability for any NSPS or NESHAP subparts.

(1) The facility shall document all changes in the contents of any tank and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for storing materials for bulk terminal operations

J. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. B21, 4L, South Flowable, EC12, EC44, B37, etc.). These materials are brought to the facility, stored, maintained, and then packaged (containers, drums) or loaded into tankers or railcars and transferred to another process or off site.

K. The amount of VOC-containing material for the bulk terminal operations that is loaded in and loaded out of the tanks in B28 tank farm shall not exceed a throughput of 5.0 Million Gallons per rolling twelve-month period.

(1) The permittee shall maintain the following monthly records for all VOC-containing material for the packaging and bulk terminal operations that is stored in the tanks in B28 tank farm:
   c) The identification and origins of each VOC-containing material;
   d) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
   e) the amount of VOC-containing material stored;
   f) the twelve month total rolling total of VOC-containing material process stored.

L. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations that is stored in the tanks in B28 tank farm shall be less than 25.0 psia · lb/lb · mol.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations stored in the tanks in B28 tank farm.
Conditions for storing materials for the EC12 processing line

M. The amount of VOC-containing material from or for the EC12 processing line operations that is loaded in and loaded out of the tanks in B28 tank farm shall not exceed a throughput of 5.0 Million Gallons per rolling twelve-month period.

(1) The permittee shall maintain the following monthly records for all VOC-containing material from or for the EC12 process that is stored in the tanks in B28 tank farm:
   a) The identification of each VOC-containing material stored;
   b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
   c) the amount of VOC-containing material stored;
   d) the twelve month total rolling total of VOC-containing material stored.

N. The product of the true vapor pressure and the molecular weight of each VOC-containing material from or for the EC12 process that is stored in the tanks in B28 tank farm shall be less than 25.0 psia \( \cdot \) lb/lb \( \cdot \) mol.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material from or for the EC12 process stored in the tanks in B28 tank farm.

Authority for Requirement:  DNR Construction Permits Listed in Table: Associated Equipment

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:  DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

<table>
<thead>
<tr>
<th>EP ID</th>
<th>Stack Height, Feet</th>
<th>Discharge Style</th>
<th>Stack Opening, inches</th>
<th>Stack Temperature, °F</th>
<th>Exhaust Flowrate, SCFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B28-W</td>
<td>13</td>
<td>Horizontal</td>
<td>6</td>
<td>Ambient</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B28-E</td>
<td>13</td>
<td>Horizontal</td>
<td>6</td>
<td>Ambient</td>
<td>Displacement</td>
</tr>
</tbody>
</table>

Authority for Requirement:  DNR Construction Permits Listed in Table: Associated Equipment

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

- **Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Building 28 and 31 Equipment Leaks

Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**
*The emissions from this emission point shall not exceed the levels specified below.*

None at this time.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Operational Limits & Requirements**
*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials handled in the Building 28 (B28) and Building 31 (B31) equipment leak components, the owner or operator shall record and document the material handled and the origins of the material (i.e. specific processing line, bulk terminal materials, etc.).
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials handled in the B28 and B31 equipment leak components.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall
be initiated promptly upon discovery.

D. The equipment leak components used in the B28 tank farm and the associated loadouts used for Bulk Transfer Operations shall have a maximum of 372 light or heavy liquid valves, 15 light or heavy liquid pumps, 1545 light or heavy liquid connectors, and 15 sample connections. The process shall not use, gas valves, compressors, open-ended lines, agitators or pressure relief valves that are in VOC service. This shall include all of the equipment leak components used in the B28 tank farm and the associated loadouts to handle any VOC-containing material for the Bulk Transfer Operations.

(1) The owner or operator shall document the number of each type equipment leak component used in B28 tank farm and the associated loadouts used for Bulk Transfer Operations. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1020, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

E. The equipment leak components used in the B31 tank farm and the associated loadouts used for Bulk Transfer Operations shall have a maximum of 400 light or heavy liquid, 11 light or heavy liquid pumps, 1338 light or heavy liquid connectors, 11 sample connections. The process shall not use gas valves, compressors, open-ended lines, agitators or pressure relief valves that are in VOC service. This shall include all of the equipment leak components used in the B31 tank farm and the associated loadouts to handle any VOC-containing material.

(1) The owner or operator shall document the number of each type equipment leak component used in B31 tank farm and the associated loadouts used for Bulk Transfer Operations. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1020, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

NESHAP Requirements (EC12 Processing Line)

F. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515,
§63.2520, and §63.2525. This requirement applies to equipment leaks in Building 28 for tanks used for the EC12 processing line.

G. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in the referenced subparts F, H, or UU.
   (1) The permittee shall document the subpart they are complying with, and meet all of the applicable requirements as specified in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the permittee is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1020 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the permittee shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed. This requirement applies to equipment leaks for tanks used for the EC12 processing line.

H. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in Buildings 28 and 31.
   (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
## Emission Point ID Number: Building 28 Loadouts

### Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B28-LO-1</td>
<td>B28-LO-1</td>
<td>Building 28 Loadout 1</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-720</td>
</tr>
<tr>
<td>EP-B28-LO-5</td>
<td>B28-LO-5</td>
<td>Building 28 Loadout 5</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-724</td>
</tr>
<tr>
<td>EP-B28-LO-7</td>
<td>B28-LO-7</td>
<td>Building 28 Loadout 7</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-726</td>
</tr>
</tbody>
</table>

### Raw Material/Fuel: Herbicide

### Applicable Requirements

#### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

*The emissions from this emission point shall not exceed the levels specified below.*

None at this time.

**Authority for Requirement:** DNR Construction Permits Listed in Table: Associated Equipment

#### Operational Limits & Requirements

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.

(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment...
for this process.

B. The owner or operator shall only loadout materials from the bulk terminal operations (see definition in Condition 5.G) and the EC12 processing area in emission points EP-B28-LO-1 through EP-B28-LO-7, and EP-B28-Hose (henceforth called Building 28 Loadouts).

(1) For all materials transferred in the Building 28 Loadouts, the owner or operator shall record and document:
   a) the loadout used;
   b) the amount of VOC-containing material transferred;
   c) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
   d) if the material is an organic liquid, as defined in §63.2406

(2) For all materials transferred in the Building 28 Loadouts from the EC12 processing line, the owner or operator shall record and document:
   a) if the material is produced in an MCPU for NESHAP Subpart FFFF; and
   b) the vapor pressure.

(3) For all materials transferred in the Building 28 Loadouts from the bulk terminal operations, the owner or operator shall record and document:
   a) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
   b) if the material is an organic liquid, as defined in §63.2406.

(4) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC-containing material transferred in the Building 28 Loadouts.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

NSPS and NESHAP Requirements

D. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

E. For each loadout covered under this permit, the owner or operator shall determine and document:

(1) if the loadout is subject to 40 CFR Part 63 Subpart FFFF; and, if subject,:
   a) if it is a transfer rack, per the definition in § 63.2550,
   b) to which miscellaneous organic chemical process unit (MCPU) the transfer rack is assigned, using the procedures in § 63.2435(d).
   c) the group status, as defined §63.2550.

(2) if the loadout is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-
Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

F. The facility shall analyze all changes in the material transferred, process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the loadouts in B28.
   (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for product loadout for the bulk terminal operations for Building 28

G. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. B21, 4L, South Flowable, EC12, EC44, B37, etc.) for Building 28. These materials are brought to the facility, stored, maintained, and then packaged in containers or drums or loaded into tankers or railcars and transferred to another process or off site.

H. The amount of VOC-containing material for the bulk terminal operations loaded out (transferred) in the B28 Loadouts shall not exceed 5.0 Million Gallons per rolling twelve-month period.
   (1) The permittee shall maintain the following monthly records for all VOC-containing material for the packaging and bulk terminal operations transferred in Building 28 (B28):
      a) The identification and origins of each VOC-containing material transferred;
      b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;
      c) the amount of VOC-containing material transferred;
      d) the twelve month total rolling total of VOC-containing material transferred.

I. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations loaded out (transferred) in the B28 Loadouts shall be less than 25.0 psia \cdot \text{lb/lb} \cdot \text{mol}.
   (1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations transferred in B28 Loadouts.

Conditions for product loadout for the EC12 processing line

J. The amount of VOC-containing material from or for the EC12 processing line that is loaded out (transferred) in the Building 28 Loadouts shall not exceed 5.0 Million Gallons per rolling twelve-month period.
   (1) The permittee shall maintain the following monthly records for all VOC-containing material from or for the EC12 process that loaded out (transferred) in the Building 28 Loadouts:
      a) The identification and origins of each VOC-containing material transferred;
      b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;
      c) the amount of VOC-containing material loaded out (transferred);
d) the twelve month total rolling total of VOC-containing material loaded out (transferred).

K. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the EC12 processing line loaded out (transferred) in the B28 Loadouts shall be less than 25.0 psia · lb/lb · mol.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the EC12 processing line loaded out (transferred) in the B28 Loadouts.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
40 CFR

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number:** B29-EL

**Associated Equipment**

**Associated Emission Unit ID Numbers** (if multiple units vent thru this EP): B29-EL

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Emission Unit vented through this Emission Point: B29-EL  
Emission Unit Description: Building 29 Equipment Leaks  
Raw Material/Fuel: Herbicide  
Rated Capacity: N/A

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**  
*The emissions from this emission point shall not exceed the levels specified below.*

None at this time

**Authority for Requirement:** DNR Construction Permit 18-A-743

**Operational Limits & Requirements**  
*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.  
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials handled in the Building 29 (B29) equipment leak components, the owner or operator shall record and document the material handled and the origins of the material (i.e. EC12 processing lines, bulk terminal materials, etc.).  
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials handled in the B29 equipment leak components.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
D. The equipment leak components used in the B29 tank farm and the associated loadouts used for Bulk Transfer Operations shall have a maximum of 533 light and heavy liquid valves, 18 light and heavy liquid pumps, 2706 light and heavy liquid connectors, and 18 sample connections. The process shall not use any gas valves, compressors, open-ended lines, agitators, or pressure relief valves that are in VOC service. This shall include all of the equipment leak components used in the B29 tank farm and the associated loadouts to handle any VOC-containing material.

(1) The owner or operator shall document the number of each type equipment leak component used in B29 tank farm and the associated loadouts used for Bulk Transfer Operations. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1020, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

NESHAP Requirements (EC12 Processing Line)

E. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing—Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525. This requirement applies to equipment leaks for tanks used for the EC12 processing line.

F. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in in the referenced subparts F, H, or UU.

(1) The permittee shall document the subpart they are complying with, and meet all of the applicable requirements as specified in in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the permittee is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1020 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the permittee shall notify the Iowa DNAR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed. This requirement applies to equipment leaks for tanks used for the EC12 processing line.

G. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in Building 29.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.
NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart EEEE National Emission Standards for Hazardous Air Pollutants; Organic Liquids Distribution (Non-gasoline).

Authority for Requirement: DNR Construction Permit 18-A-743

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart EEEE National Emission Standards for Hazardous Air Pollutants; Organic Liquids Distribution (Non-gasoline).

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment 40 CFR 63 Subpart EEEE

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number:** HR-B29

**Associated Equipment**

**Associated Emission Unit ID Numbers** (if multiple units vent thru this EP): HR-B29

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**Emission Unit vented through this Emission Point:** HR-B29  
**Emission Unit Description:** Building 29 Haul Roads  
**Raw Material/Fuel:** Herbicide  
**Rated Capacity:** N/A

**Applicable Requirements**

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

**Pollutant:** Fugitive Dust  
**Emission Limit(s):** The owner/operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property.

**Authority for Requirement:**  
DNR Construction Permit 19-A-065  
567 IAC 23.3(2)c"

**Operating Requirements with Associated Monitoring and Recordkeeping**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The maximum vehicle weight, including cargo, of the vehicles traveling the haul roads for the Building 29 tank farms and loadouts for Bulk Transfer Operations shall not exceed the maximum vehicle weight in 23 CFR§658.17(b).  
   (1) The facility shall keep a copy of 23 CFR§658.17(b).  
   (2) If the maximum vehicle weight is increased in 23 CFR§658.17(b) or if 23 CFR§658.17(b) is rescinded, the facility has 30 days to request a modification of this permit.

B. The vehicle miles traveled by trucks used for Building 29 tank farms and the associated loadouts for Bulk Transfer Operations shall be less than 53,900 per rolling 12-month period. The owner or operator shall determine and record the following for Buildings 29 Bulk Transfer Operations:
(1) All road segments used and the corresponding lengths in miles, which includes all roads to bring materials in, internal handling, and transporting finished materials out.
(2) The number of trips taken on each road segment transporting materials in and product out of the facility shall be recorded each day.
(3) The number of trips taken on the internal road segments shall be calculated using the following method:
   i. Record the amount of material and volume of the mini bulk, in gallons, used each day.
   ii. Each month, calculate the number of mini bulks by dividing the volume of product by the volume of the mini bulk used. One mini bulk equals one round trip between internal buildings.
(4) Each month, calculate the total vehicle miles traveled (VMT) by multiplying the number of trips taken on each road segment by the distance of the corresponding road segment and summing the results.
(5) Calculate and record the twelve-month rolling total of total VMT in miles, monthly.

C. The haul roads covered under this permit are required to employ best management practices to reasonably prevent the discharge of fugitive dust from all haul roads beyond the lot line of the property on which it is located. These BMP are examples of reasonable practices to minimize the generation of fugitive dust emissions.

   **BMP on haul roads include but are not limited to:**
   - Limiting truck speed on facility property
   - Watering and/or sweeping paved roadways
   - Immediately cleaning-up or dampening all material spills on the roadways

   (1) The owner or operator shall document all best management practices used at the facility to minimize fugitive dust emissions.

Authority for Requirement: DNR Construction Permit 19-A-065

**Monitoring Requirements**
*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**
- Yes ☐ No ☒

**Facility Maintained Operation & Maintenance Plan Required?**
- Yes ☐ No ☒

**Compliance Assurance Monitoring (CAM) Plan Required?**
- Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Building 29 Loadouts

Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B29-LO-1</td>
<td>B29-LO-1</td>
<td>Building 29 Loadout 1</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-744</td>
</tr>
<tr>
<td>EP-B29-LO-3</td>
<td>B29-LO-3</td>
<td>Building 29 Loadout 3</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-746</td>
</tr>
<tr>
<td>EP-B29-LO-5</td>
<td>B29-LO-5</td>
<td>Building 29 Loadout 5</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-748</td>
</tr>
<tr>
<td>EP-B29-LO-6</td>
<td>B29-LO-6</td>
<td>Building 29 Loadout 6</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-749</td>
</tr>
<tr>
<td>EP-B29-LO-7</td>
<td>B29-LO-7</td>
<td>Building 29 Loadout 7</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-750</td>
</tr>
<tr>
<td>EP-B29-LO-10</td>
<td>B29-LO-10</td>
<td>Building 29 Loadout 10</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-753</td>
</tr>
<tr>
<td>EP-B29-Hose</td>
<td>B29-Hose</td>
<td>Building 29 Loadout Hose</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-754</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb/hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:
General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the equipment for this process.

B. The owner or operator shall only loadout materials from the bulk terminal operations (see definition in Condition 5.G) and the EC12 processing area in emission points EP-B29-LO-1 through EP-B29-LO-10, and EP-B29-Hose (henceforth called Building 29 Loadouts).
   (1) For all materials transferred in the Building 29 Loadouts, the owner or operator shall record and document:
      a) the loadout used;
      b) the amount of VOC-containing material transferred;
      c) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
      d) if the material is an organic liquid, as defined in §63.2406
   (2) For all materials transferred in the Building 29 Loadouts from the EC12 processing line, the owner or operator shall record and document:
      a) if the material is produced in an MCPU for NESHAP Subpart FFFF; and
      b) the vapor pressure in kPa.
   (3) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC-containing material transferred in the Building 29 Loadouts.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

NSPS and NESHAP Requirements

D. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing—Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

E. For each loadout covered under this permit, the owner or operator shall determine and document:
   (1) if the loadout is subject to 40 CFR Part 63 Subpart FFFF; and, if subject,:
      a) if it is a transfer rack, per the definition in § 63.2550,
      b) to which miscellaneous organic chemical process unit (MCPU) the transfer rack is assigned, using the procedures in § 63.2435(d).
      c) the group status, as defined §63.2550.
   (2) if the loadout is subject to 40 CFR Part 63 Subpart EEEE, National Emission
Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

F. The facility shall analyze all changes in the material transferred, process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the loadouts in B29.
   (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for product loadout for the bulk terminal operations for Building 29

G. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. B21, 4L, South Flowable, EC12, EC44, B37, etc.) for Building 29. These materials are brought to the facility, stored, maintained, and then packaged in containers or drums or loaded into tankers or railcars and transferred to another process or off site.

H. The amount of VOC-containing material for the bulk terminal operations loaded out (transferred) in the B29 Loadouts shall not exceed 15.0 Million Gallons per rolling twelve-month period.
   (1) The permittee shall maintain the following monthly records for all VOC-containing material for the packaging and bulk terminal operations transferred in Building 29 (B29):
      a) The identification and origins of each VOC-containing material transferred;
      b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;
      c) the amount of VOC-containing material transferred;
      d) the twelve month total rolling total of VOC-containing material transferred.

I. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations loaded out (transferred) in the B29 Loadouts shall be less than 40.0 psia ∙ lb/lb ∙ mol.
   (1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations transferred in B29 Loadouts.

Conditions for product loadout for the EC12 processing line

J. The amount of VOC-containing material from or for the EC12 processing line that is loaded out (transferred) in the Building 29 Loadouts shall not exceed 15.0 Million Gallons per rolling twelve-month period.
   (1) The permittee shall maintain the following monthly records for all VOC-containing material from or for the EC12 process that loaded out (transferred) in the Building 29 Loadouts:
      a) The identification and origins of each VOC-containing material transferred;
      b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;
c) the amount of VOC-containing material loaded out (transferred);
d) the twelve month total rolling total of VOC-containing material loaded out (transferred).

K. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the EC12 processing line loaded out (transferred) in the B29 Loadouts shall be less than 40.0 psia · lb/lb · mol.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the EC12 processing line loaded out (transferred) in the B29 Loadouts.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment 40 CFR 63 Subpart FFFF 567 IAC 23.1(4)"cf"

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
### Emission Point ID Number: Building 29 Storage Tanks

#### Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TK638-TK646</td>
<td>Building 29 Storage Tank 638 through Building 29 Storage Tank 646</td>
<td>37,283 gallons</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TK649-TK650</td>
<td>Building 29 Storage Tank 649 through Building 29 Storage Tank 650</td>
<td>29,072 gallons</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

### Raw Material/Fuel: Herbicide

#### Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

None at this time.

**Authority for Requirement:** DNR Construction Permits Listed in Table: Associated Equipment
Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the equipment for this process.

B. The owner or operator shall only store materials from the bulk terminal operations (see definition in Condition 5.J) and the EC12 processing line in B29 tank farm.
   (1) For all materials stored in the B29 tank farm, the owner or operator shall determine and document:
      a) the tank used;
      b) the VOC-containing material stored;
      c) the origins of the VOC-containing material (i.e. EC12 processing line, bulk terminal operations); and
      d) the amount of VOC-containing material stored.
   (2) For all materials stored in the Building 29 Tank Farm from the EC12 processing line, the owner or operator shall also determine and document:
      a) if the material is produced in an MCPU for NESHAP Subpart FFFF; and
      b) the maximum true vapor pressure, in kPa.
   (3) For all materials stored in the Building 29 Tank Farm from the bulk terminal operations, the owner or operator shall also determine and document:
      a) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of NESHAP Subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
      b) if the material is an organic liquid, as defined in §63.2406.
   (4) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the B29 storage tanks.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

NSPS and NESHAP Requirements

D. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL), as defined in 40 CFR Part 51.100, stored in the bulk storage tanks in B29 shall be less than 15.0 kPa.
   (1) The facility shall keep readily accessible records showing the dimensions and capacity for the bulk storage tanks in B29.
   (2) The facility shall document the maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL) stored in the bulk storage tanks in B29.
(3) The facility shall notify the Administrator within 30 days if the maximum true vapor pressure of the liquids stored in the bulk storage tanks in B29 exceeds 15.0 kPa.

E. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

F. For each storage tank covered under this permit, the owner or operator shall determine and document if the storage tank is subject to 40 CFR Part 63 Subpart FFFF, and, if subject, to which miscellaneous organic chemical process unit (MCPU) the tank is assigned, using the procedures in § 63.2435 (d), if applicable.

G. The material stored in the bulk storage tanks in B29 that are part of a miscellaneous organic chemical process unit, and with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall determine and document the maximum true vapor pressure of each material stored and the group status for each storage tanks that is part of a miscellaneous organic chemical process unit in the B29 Tank Farm, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

H. For each tank covered under this permit, the owner or operator shall determine and document if the tank is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

I. The facility shall analyze all changes in material stored in any applicable storage tank and determine if there is a change in applicability for any NSPS or NESHAP subparts.
   (1) The facility shall document all changes in the contents of any tank and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for storing materials for bulk terminal operations

J. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. B21, 4L, South Flowable, EC12, EC44, B37, etc.). These materials are brought to the facility, stored, maintained, and then packaged (containers, drums) or loaded into tankers or railcars and transferred to another process or off site.

K. The amount of VOC-containing material for the packaging and bulk terminal operations that is loaded in and loaded out of the tanks in B29 tank farm shall not exceed a throughput of 15.0 Million Gallons per rolling twelve-month period.
   (1) The permittee shall maintain the following monthly records for all VOC-containing
material for the packaging and bulk terminal operations that is stored in the tanks in B29 tank farm:
   a) The identification and origins of each VOC-containing material;
   b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
   c) the amount of VOC-containing material stored;
   d) the twelve month total rolling total of VOC-containing material process stored.

L. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations that is stored in the tanks in B29 tank farm shall be less than 40.0 psia \cdot \text{lb/lb} \cdot \text{mol}.
   (1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations stored in the tanks in B29 tank farm.

Conditions for storing materials for the EC12 processing line

M. The amount of VOC-containing material from or for the EC12 processing line that is stored in the tanks in B29 tank farm shall not exceed 15.0 Million Gallons per rolling twelve-month period.
   (1) The permittee shall maintain the following monthly records for all VOC-containing material from or for the EC12 process that is stored in the tanks in B29 tank farm:
      a) The identification of each VOC-containing material stored;
      b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
      c) the amount of VOC-containing material stored;
      d) the twelve month total rolling total of VOC-containing material stored.

N. The product of the true vapor pressure and the molecular weight of each VOC-containing material from or for the EC12 process that is stored in the tanks in B29 tank farm shall be less than 40.0 psia \cdot \text{lb/lb} \cdot \text{mol}.
   (1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material from or for the EC12 process stored in the tanks in B29 tank farm.

Authority for Requirement:  DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:  DNR Construction Permits Listed in Table: Associated Equipment

40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
Emission Point Characteristics

*The emission point shall conform to the specifications listed below.*

<table>
<thead>
<tr>
<th>EP ID</th>
<th>Stack Height, Feet</th>
<th>Discharge Style</th>
<th>Stack Opening, inches</th>
<th>Stack Temperature, °F</th>
<th>Exhaust Flowrate, SCFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B29-Vent1</td>
<td>8</td>
<td>Downward</td>
<td>6</td>
<td>Ambient</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B29-Vent2</td>
<td>8</td>
<td>Downward</td>
<td>6</td>
<td>Ambient</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B29-Vent3</td>
<td>8</td>
<td>Downward</td>
<td>6</td>
<td>Ambient</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B29-Vent4</td>
<td>8</td>
<td>Downward</td>
<td>6</td>
<td>Ambient</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B29-Vent5</td>
<td>8</td>
<td>Downward</td>
<td>6</td>
<td>Ambient</td>
<td>Displacement</td>
</tr>
</tbody>
</table>

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

Agency Approved Operation & Maintenance Plan Required? [No]

Facility Maintained Operation & Maintenance Plan Required? [No]

Compliance Assurance Monitoring (CAM) Plan Required? [No]

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Building 31 Storage Tanks

Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B31-W</td>
<td>TK624-TK635</td>
<td>Building 31 Storage Tank 624 through Storage Tank 635</td>
<td>31,929 gallons</td>
<td>None</td>
<td>18-A-710</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only store materials from the bulk terminal operations (see definition in Condition 5.G) in the B31 tank farm.
   (1) For all materials stored in the Building 31 tank farm, the owner or operator shall determine and document:
       a) the tank used;
       b) the VOC-containing material stored,
       c) the amount of VOC-containing material stored.
       d) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified
in §63.2354; as needed to determine whether the material is an organic liquid; and

e) if the material is an organic liquid, as defined in §63.2406.

(2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials
stored in the B31 storage tanks.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall
be initiated promptly upon discovery.

NSPS and NESHAP Requirements

D. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile
organic compounds (VOL), as defined in 40 CFR Part 51.100, stored in the bulk storage
tanks in B31 shall be less than 15.0 kPa.

(1) The facility shall keep readily accessible records showing the dimensions and
capacity for the bulk storage tanks in B31.

(2) The facility shall document the maximum true vapor pressure, as defined in 40 CFR
Part 60.111b, of the volatile organic compounds (VOL) stored in the bulk storage tanks
in B31.

(3) The facility shall notify the Administrator within 30 days if the maximum true vapor
pressure of the liquids stored in the bulk storage tanks in B31 exceeds 15.0 kPa.

E. For each tank covered under this permit, the owner or operator shall determine and
document if the tank is subject to 40 CFR Part 63 Subpart EEEE, National Emission
Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If
subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

F. The facility shall analyze all changes in material stored in any applicable storage tank and
determine if there is a change in applicability for any NSPS or NESHAP subparts.

(1) The facility shall document all changes in the contents of any tank and the results of
all NSPS or NESHAP determinations made for these changes.

Conditions for storing materials for bulk terminal operations

G. Bulk terminal operations shall include receiving, storing, maintaining, and loading
activities involving materials that are not produced in a specific processing line at the plant
(i.e. B21, 4L, South Flowable, EC12, EC44, B37, etc.). These materials are brought to the
facility, stored, maintained, and then packaged (containers, drums) or loaded into tankers
or railcars and transferred to another process or off site.

H. The amount of VOC-containing material for the bulk terminal operations that is loaded in
and loaded out of the tanks in B31 tank farm shall not exceed a throughput of 5.0 Million
Gallons per rolling twelve-month period.

(1) The permittee shall maintain the following monthly records for all VOC-containing
material for the packaging and bulk terminal operations that is stored in the tanks in
B31 tank farm:

a) The identification and origins of each VOC-containing material;
b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
c) the amount of VOC-containing material stored;
d) the twelve month total rolling total of VOC-containing material process stored.

I. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations that is stored in the tanks in B31 tank farm shall be less than 25.0 psia \cdot lb/lb \cdot mol.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations stored in the tanks in B31 tank farm.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart EEEE National Emission Standards for Hazardous Air Pollutants; Organic Liquids Distribution (Non-gasoline).

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

40 CFR 63 Subpart EEEE

**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

<table>
<thead>
<tr>
<th>EP ID</th>
<th>Stack Height, Feet</th>
<th>Discharge Style</th>
<th>Stack Opening, inches</th>
<th>Stack Temperature, °F</th>
<th>Exhaust Flowrate, SCFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B31-E</td>
<td>13.5</td>
<td>Horizontal</td>
<td>6</td>
<td>Ambient</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B31-W</td>
<td>13.5</td>
<td>Horizontal</td>
<td>6</td>
<td>Ambient</td>
<td>Displacement</td>
</tr>
</tbody>
</table>

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment
**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☑

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☑

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☑

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Building 31 Loadouts

Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B31-LO-1</td>
<td>B31-LO-1</td>
<td>Building 31 Loadout 1</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-711</td>
</tr>
<tr>
<td>EP-B31-LO-3</td>
<td>B31-LO-3</td>
<td>Building 31 Loadout 3</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-713</td>
</tr>
<tr>
<td>EP-B31-LO-4</td>
<td>B31-LO-4</td>
<td>Building 31 Loadout 4</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-714</td>
</tr>
<tr>
<td>EP-B31-LO-5</td>
<td>B31-LO-5</td>
<td>Building 31 Loadout 5</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-715</td>
</tr>
<tr>
<td>EP-B31-LO-6</td>
<td>B31-LO-6</td>
<td>Building 31 Loadout 6</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-716</td>
</tr>
<tr>
<td>EP-B31-Hose</td>
<td>B31-Hose</td>
<td>Building 31 Loadout Hose</td>
<td>300 gallons/min</td>
<td>None</td>
<td>18-A-717</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dsfc, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.

   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.
B. The owner or operator shall only loadout materials from the bulk terminal operations (see definition in Condition 5.F) in emission points EP-B31-LO-1 through EP-B31-LO-6 and EP-B31-Hose.

(1) For all materials transferred in the Building 31 Loadouts, the owner or operator shall record and document:
   a) the loadout used;
   b) the amount of VOC-containing material transferred:
   c) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
   d) if the material is an organic liquid, as defined in §63.2406

(2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC-containing material transferred in the Building 31 Loadouts.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

NSPS and NESHAP Requirements
D. For each loadout covered under this permit, the owner or operator shall determine and document if the loadout is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

E. The facility shall analyze all changes in the material transferred, process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the loadouts in B31.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for product loadout for the bulk terminal operations for Building 31
F. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. B21, 4L, South Flowable, EC12, EC44, B37, etc.) for Building 31. These materials are brought to the facility, stored, maintained, and then packaged in containers or drums or loaded into tankers or railcars and transferred to another process or off site.

G. The amount of VOC-containing material for the bulk terminal operations loaded out (transferred) in the EU-B31-LO-1 through EU-B31-LO-6 and EU-B31-Hose shall not exceed 5.0 Million Gallons per rolling twelve-month period.

(1) The permittee shall maintain the following monthly records for all VOC-containing material for the packaging and bulk terminal operations transferred in Building 31 (B31):
   a) The identification and origins of each VOC-containing material transferred;
   b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;
c) the amount of VOC-containing material transferred;
d) the twelve month total rolling total of VOC-containing material transferred.

H. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations loaded out (transferred) in EU-B31-LO-1 through EU-B31-LO-6 and EU-B31-Hose, shall be less than 25.0 psia \cdot lb/lb \cdot mol.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations transferred in emission units EU-B31-LO-1 through EU-B31-LO-6 and EU-B31-Hose.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart EEEE National Emission Standards for Hazardous Air Pollutants; Organic Liquids Distribution (Non-gasoline).

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
### Emission Point ID Number: Building 36 Storage Tanks

**Associated Equipment**

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B36TF-Tank 800</td>
<td>EU-B36TF-Tank 800</td>
<td>Building 36 Storage Tank 800</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-524</td>
</tr>
<tr>
<td>EP-B36TF-Tank 801</td>
<td>EU-B36TF-Tank 801</td>
<td>Building 36 Storage Tank 801</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-525</td>
</tr>
<tr>
<td>EP-B36TF-Tank 802</td>
<td>EU-B36TF-Tank 802</td>
<td>Building 36 Storage Tank 802</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-526</td>
</tr>
<tr>
<td>EP-B36TF-Tank 803</td>
<td>EU-B36TF-Tank 803</td>
<td>Building 36 Storage Tank 803</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-527</td>
</tr>
<tr>
<td>EP-B36TF-Tank 804</td>
<td>EU-B36TF-Tank 804</td>
<td>Building 36 Storage Tank 804</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-528</td>
</tr>
<tr>
<td>EP-B36TF-Tank 805</td>
<td>EU-B36TF-Tank 805</td>
<td>Building 36 Storage Tank 805</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-529</td>
</tr>
<tr>
<td>EP-B36TF-Tank 806</td>
<td>EU-B36TF-Tank 806</td>
<td>Building 36 Storage Tank 806</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-530</td>
</tr>
<tr>
<td>EP-B36TF-Tank 807</td>
<td>EU-B36TF-Tank 807</td>
<td>Building 36 Storage Tank 807</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-531</td>
</tr>
<tr>
<td>EP-B36TF-Tank 808</td>
<td>EU-B36TF-Tank 808</td>
<td>Building 36 Storage Tank 808</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-532</td>
</tr>
<tr>
<td>EP-B36TF-Tank 809</td>
<td>EU-B36TF-Tank 809</td>
<td>Building 36 Storage Tank 809</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-533</td>
</tr>
<tr>
<td>EP-B36TF-Tank 810</td>
<td>EU-B36TF-Tank 810</td>
<td>Building 36 Storage Tank 810</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-534</td>
</tr>
<tr>
<td>EP-B36TF-Tank 811</td>
<td>EU-B36TF-Tank 811</td>
<td>Building 36 Storage Tank 811</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-535</td>
</tr>
<tr>
<td>EP-B36TF-Tank 812</td>
<td>EU-B36TF-Tank 812</td>
<td>Building 36 Storage Tank 812</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-536</td>
</tr>
<tr>
<td>EP-B36TF-Tank 813</td>
<td>EU-B36TF-Tank 813</td>
<td>Building 36 Storage Tank 813</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-537</td>
</tr>
<tr>
<td>EP-B36TF-Tank 814</td>
<td>EU-B36TF-Tank 814</td>
<td>Building 36 Storage Tank 814</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-538</td>
</tr>
<tr>
<td>EP-B36TF-Tank 815</td>
<td>EU-B36TF-Tank 815</td>
<td>Building 36 Storage Tank 815</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-539</td>
</tr>
<tr>
<td>EP-B36TF-Tank 816</td>
<td>EU-B36TF-Tank 816</td>
<td>Building 36 Storage Tank 816</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-540</td>
</tr>
<tr>
<td>EP-B36TF-Tank 817</td>
<td>EU-B36TF-Tank 817</td>
<td>Building 36 Storage Tank 817</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-541</td>
</tr>
<tr>
<td>EP-B36TF-Tank 818</td>
<td>EU-B36TF-Tank 818</td>
<td>Building 36 Storage Tank 818</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-542</td>
</tr>
<tr>
<td>EP-B36TF-Tank 819</td>
<td>EU-B36TF-Tank 819</td>
<td>Building 36 Storage Tank 819</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-543</td>
</tr>
<tr>
<td>EP-B36TF-Tank 820</td>
<td>EU-B36TF-Tank 820</td>
<td>Building 36 Storage Tank 820</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-544</td>
</tr>
<tr>
<td>EP-B36TF-Tank 821</td>
<td>EU-B36TF-Tank 821</td>
<td>Building 36 Storage Tank 821</td>
<td>37,625 gallons</td>
<td>None</td>
<td>19-A-545</td>
</tr>
</tbody>
</table>
Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only store materials from the bulk terminal operations (see definition in Condition 5.H) in B36 tank farm.
   (1) For all materials stored in the B36 tank farm, the owner or operator shall determine and document:
   a) the tank used;
   b) the VOC-containing material transferred; and
   c) the amount of VOC-containing material stored.
   d) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of NESHAP Subpart EEEE, as determined using
procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
e) if the material is an organic liquid, as defined in §63.2406.
(2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the B36 storage tanks.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

NSPS and NESHAP Requirements

D. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL), as defined in 40 CFR Part 51.100, stored in the bulk storage tanks in B36 shall be less than 15.0 kPa.
(1) The facility shall keep readily accessible records showing the dimensions and capacity for the bulk storage tanks in B36.
(2) The facility shall document the maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL) stored in the bulk storage tanks in B36.
(3) The facility shall notify the Administrator within 30 days if the maximum true vapor pressure of the liquids stored in the bulk storage tanks in B36 exceeds 15.0 kPa.

E. For each tank covered under this permit, the owner or operator shall determine and document if the tank is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

F. The facility shall analyze all changes in material stored in any applicable storage tank and determine if there is a change in applicability for any NSPS or NESHAP subparts.
(1) The facility shall document all changes in the contents of any tank and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for storing materials for bulk terminal operations

G. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. B21, 4L, South Flowable, EC12, EC44, B37, etc.). These materials are brought to the facility, stored, maintained, and then packaged (containers, drums) or loaded into tankers or railcars and transferred to another process or off site.

H. The amount of VOC-containing material for the bulk terminal operations that is loaded in and loaded out of the tanks in B36 tank farm shall not exceed a throughput of 12.0 Million Gallons per rolling twelve-month period.
(1) The permittee shall maintain the following monthly records for all VOC-containing material for the packaging and bulk terminal operations that is stored in the tanks in B36 tank farm:
a) The identification and origins of each VOC-containing material;
b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;  
c) the amount of VOC-containing material stored;  
d) the twelve month total rolling total of VOC-containing material stored.

I. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations that is stored in the tanks in B36 tank farm shall be less than 60.0 psia · lb/lb · mol.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations stored in the tanks in B36 tank farm.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Emission Point Characteristics**  
The emission point shall conform to the specifications listed below.

<table>
<thead>
<tr>
<th>EP ID</th>
<th>Stack Height, Feet</th>
<th>Discharge Style</th>
<th>Stack Opening, inches</th>
<th>Stack Temperature, °F</th>
<th>Exhaust Flowrate, SCFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B36TF-Tank 800 through EP-B36TF-Tank 826</td>
<td>14</td>
<td>Indoors</td>
<td>2</td>
<td>Ambient</td>
<td>Displacement</td>
</tr>
</tbody>
</table>

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**  
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Building 36 Loadouts and Packaging

Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B36-LO-1</td>
<td>B36-LO-1</td>
<td>Building 36 Loadout 1</td>
<td>400 gpm</td>
<td>None</td>
<td>19-A-551</td>
</tr>
<tr>
<td>EP-B36-LO-3</td>
<td>B36-LO-3</td>
<td>Building 36 Loadout 3</td>
<td>400 gpm</td>
<td>None</td>
<td>19-A-553</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only loadout materials from the bulk terminal operations (see definition in Condition 5.G) in emission points EP-B36-LO-1 through EP-B36-LO-3, and EP-B36-Hose (henceforth called Building 36 Loadouts).
   (1) For all materials transferred in the Building 36 Loadouts, the owner or operator shall record and document:
a) the loadout used;
b) the amount of VOC-containing material transferred:
c) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
d) if the material is an organic liquid, as defined in §63.2406.
e) the annual average true vapor pressure and/or the percent by weight of organic HAP listed in Table 1 of subpart EEEE, as determined using procedures specified in §63.2354; as needed to determine whether the material is an organic liquid; and
f) if the material is an organic liquid, as defined in §63.2406.

(2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC-containing material transferred in the Building 36 Loadouts.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

NSPS and NESHAP Requirements

D. For each loadout covered under this permit, the owner or operator shall determine and document:

(1) if the loadout is subject to 40 CFR Part 63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). If subject, the owner or operator shall meet all applicable requirements of Subpart EEEE.

E. The facility shall analyze all changes in the material transferred, process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the loadouts in B36.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Conditions for product loadout for the bulk terminal operations for Building 36

F. Bulk terminal operations shall include receiving, storing, maintaining, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. B21, 4L, South Flowable, EC12, EC44, B37, etc.) for Building 36. These materials are brought to the facility, stored, maintained, and then packaged in containers or drums or loaded into tankers or railcars and transferred to another process or off site.

G. The amount of VOC-containing material for the bulk terminal operations loaded out (transferred) in the B36 Loadouts shall not exceed 12.0 Million Gallons per rolling twelve-month period.

(1) The permittee shall maintain the following monthly records for all VOC-containing material for the packaging and bulk terminal operations transferred in Building 36 (B36):

a) The identification and origins of each VOC-containing material transferred;
b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;
c) the amount of VOC-containing material transferred;
d) the twelve month total rolling total of VOC-containing material transferred.

H. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations loaded out (transferred) in the B36 Loadouts shall be less than 60 psia \( \cdot \) lb/lb \( \cdot \) mol.

(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations transferred in B36 Loadouts.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?** Yes [ ] No [X]
- **Facility Maintained Operation & Maintenance Plan Required?** Yes [ ] No [X]
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes [ ] No [X]

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: B36-EL

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): B36-EL

Emission Unit vented through this Emission Point: B36-EL
Emission Unit Description: Building 36 Equipment Leaks
Raw Material/Fuel: Herbicide
Rated Capacity: N/A

Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permit 19-A-555

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials handled in the Building 36 (B36) equipment leak components, the owner or operator shall record and document the material handled and the origins of the material (i.e. specific processing line, bulk terminal materials, etc.).
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials handled in the B36 equipment leak components.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
D. The equipment leak components used in the B36 tank farm and the associated loadouts used for Bulk Transfer Operations shall have a maximum of 98 heavy liquid valves, 7 heavy liquid pumps, 495 heavy liquid connectors, and 4 sample connections. The process shall not use light liquid valves, gas valves, compressors, open-ended lines, agitators or pressure relief valves that are in VOC service. This shall include all of the equipment leak components used in the B36 tank farm and the associated loadouts to handle any VOC-containing material for the Bulk Transfer Operations.

(1) The owner or operator shall document the number of each type equipment leak component used in B36 tank farm and the associated loadouts used for Bulk Transfer Operations. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1020, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

Authority for Requirement: DNR Construction Permit 19-A-555

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number: Building 37 Process Equipment**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit Description (EU ID)</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 37 Tank 882 (EU37-TK882)</td>
<td>706 gallons</td>
</tr>
<tr>
<td>B 37 Tank 890 (EU37-TK890)</td>
<td>6,124 gallons</td>
</tr>
<tr>
<td>B 37 Tank 890 – solids addition (EU37 TK-890-BBU)</td>
<td>5,000 lb/hr</td>
</tr>
<tr>
<td>B 37 Tank 890 – solids addition (EU37 TK-890-BBS)</td>
<td>5,000 lb/hr</td>
</tr>
<tr>
<td>B 37 Tank 891 (EU37-TK891)</td>
<td>8,000 gallons</td>
</tr>
<tr>
<td>B 37 Tank 891 – solids addition (EU37 TK-891-BBU)</td>
<td>5,000 lb/hr</td>
</tr>
<tr>
<td>B 37 Tank 891 – solids addition (EU37 TK-891-BBS)</td>
<td>5,000 lb/hr</td>
</tr>
<tr>
<td>B 37 Tank 892 (EU37-TK892)</td>
<td>6,124 gallons</td>
</tr>
<tr>
<td>B 37 Tank 892 – solids addition (EU37 TK-892-BBU)</td>
<td>5,000 lb/hr</td>
</tr>
<tr>
<td>B 37 Tank 892 – solids addition (EU37 TK-892-BBS)</td>
<td>5,000 lb/hr</td>
</tr>
<tr>
<td>B 37 Tank 893 (EU37-TK893)</td>
<td>8,000 gallons</td>
</tr>
<tr>
<td>B 37 Tank 893 – solids addition (EU37 TK-893-BBU)</td>
<td>5,000 lb/hr</td>
</tr>
<tr>
<td>B 37 Tank 893 – solids addition (EU37 TK-893-BBS)</td>
<td>5,000 lb/hr</td>
</tr>
<tr>
<td>B 37 Tank 953 (EU37-TK953)</td>
<td>6,124 gallons</td>
</tr>
<tr>
<td>B 37 Tank 953 – solids addition (EU37 TK-953-BBU)</td>
<td>5,000 lb/hr</td>
</tr>
<tr>
<td>B 37 Tank 953 – solids addition (EU37 TK-953-BBS)</td>
<td>5,000 lb/hr</td>
</tr>
<tr>
<td>B 37 Tank 954 (EU37-TK954)</td>
<td>6,124 gallons</td>
</tr>
<tr>
<td>B 37 Tank 954 – solids addition (EU37 TK-954-BBU)</td>
<td>5,000 lb/hr</td>
</tr>
<tr>
<td>B 37 Tank 954 – solids addition (EU37 TK-954-BBS)</td>
<td>5,000 lb/hr</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% \(^{(1)}\)

Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 02-A-726-S2

\(^{(1)}\) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.26 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 02-A-726-S2
Pollutant: Volatile Organic Compounds (VOC)  
Emission Limit(s): 17 tons/yr  
Authority for Requirement: DNR Construction Permit 02-A-726-S2

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements
A. The permittee shall keep all ports and manways on the tanks in a closed position at all times when storing liquid materials other than when adding materials, measuring liquid heights, and cleaning or maintaining the tanks. The facility shall only use the bulk bag unloader stations and bag break stations to add solid materials to the tanks. Materials must be added to the tank in a manner that minimizes emissions.
   (1) The owner or operator shall inspect the tanks quarterly to ensure all ports are closed. The facility shall document the results of the inspection.

B. For all VOC containing materials used in Building 37 Processing Plant, the owner or operator shall record and document the materials used.
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials processed, used, or generated, in the Building 37 Processing Plant.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

Control Equipment Requirements
D. All process and control equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the control and process equipment for this process.

E. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

F. The differential pressure drop across the Final Baghouse (CE 37-1000) shall be maintained between 1.0 and 7.0 inches water column except during periods of filter replacement.
The owner or operator shall collect and record the pressure drop across Final Baghouse (CE 37-1000), in inches of water, on a daily basis. If the pressure drop across the Final Baghouse (CE 37-1000) falls outside the range specified above, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the process is not in operation.

Recordkeeping for the Building 37 Processing Plant VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in Condition 1 of this permit for the Building 37 Processing Plant. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points 37-1, 37-2, 37-3, and 37-4; those listed in the permits for Building 37 – Interior VOC Emissions, as well as those from miscellaneous sources related to B37 production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The limit also covers VOC emissions from storing materials from B37 in the storage tanks in buildings B11, B39 and B42, and packaging and loadout in buildings B11, B14, B39 and B42. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the Building 37 Processing Plant:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

G. For each product produced in the Building 37 Processing Plant, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product produced.
(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in
the equations listed below in Condition G.5. The facility shall document and provide a justification for the value for each input used.

(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.
f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit. The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(1) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(2) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

H. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition G.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

I. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in Condition 1 of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.

J. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in Condition 1 of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.
K. If the 12-month rolling total of the VOC emissions exceeds 13.5 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in Condition 1 of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in Condition 1 of this permit drops below 13.5 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 13.5 tons, daily recordkeeping will be required per this Condition of this permit.

NSPS and NESHAP Requirements

L. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

M. All batch process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the Building 37 Processing Plant) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

(3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525 (e)(1) through (3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
  a. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
  b. A record of whether each batch operated was considered a standard batch.
  c. The estimated uncontrolled and controlled emissions for each batch that is
considered to be a nonstandard batch.

d. Records of the daily 365-day rolling summations of emissions, or alternative
records that correlate to the emissions (e.g., number of batches), calculated no less
frequently than monthly.

N. Any continuous process vents that are part of the miscellaneous organic chemical process
unit for the Building 37 Processing Plant shall operate as a Group 2 continuous process
vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify all process vents that are part of the
miscellaneous organic chemical process unit for the Building 37 Processing Plant and
document the type (continuous or batch) and group status for each vent, according to
40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2455 (b), for each continuous process vent in the Building 37
Processing Plant, the facility shall determine and document the total resource
effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in
paragraphs § 63.2455 (b)(1) through (3).

O. The material stored in the storage tanks that are part of the miscellaneous organic
chemical process unit for the Building 37 Processing Plant with a capacity greater than or
equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds
per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part
63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the group status for the storage
tanks that are part of the miscellaneous organic chemical process unit for the Building
37 Processing Plant, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

P. The facility shall load less than 0.65 million liters/year of liquids that contain organic
HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or
equal to 1.5 pounds per square inch absolute in the transfer racks that are part of the
miscellaneous organic chemical process unit for the Building 37 Processing Plant, as
specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the group status for the transfer
racks that are part of the miscellaneous organic chemical process unit for the Building
37 Processing Plant, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

Q. Any wastewater streams that are part of the miscellaneous organic chemical process unit
for the Building 37 Processing Plant shall operate as a Group 2 Wastewater Streams, as
specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced
therein.

(1) The owner or operator shall meet all of the applicable reporting and recordkeeping
requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525,
and the requirements referenced therein, including applicable requirements specified
in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

R. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission
point after the compliance date, the owner or operator must comply with the Group 1
requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

S. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the Building 37 Processing Plant.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 02-A-726-S2

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 02-A-726-S2
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 50
Stack Opening, (inches, dia.): 12
Exhaust Flow Rate (scfm): 3,000
Exhaust Temperature (°F): 120
Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 02-A-726-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?  Yes ☐ No ☑
Facility Maintained Operation & Maintenance Plan Required?  Yes ☐ No ☑
Compliance Assurance Monitoring (CAM) Plan Required?  Yes ☐ No ☑

Authority for Requirement:  567 IAC 22.108(3)
## Emission Point ID Number: Building 37 Processing Tanks

### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit Description (EU ID)</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
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<tbody>
<tr>
<td>B 37 Tank 870 (EU37- TK870)</td>
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<td>8,124 gallons</td>
</tr>
<tr>
<td>B 37 Tank 871 (EU37- TK871)</td>
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<td>B 37 Tank 957 (EU37- TK957)</td>
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Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 17 tons/yr

Authority for Requirement: DNR Construction Permit 02-A-727-S2
Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements
A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The permittee shall keep all ports and manways on the tanks in a closed position at all times when storing liquid materials other than when adding materials, measuring liquid heights, and cleaning or maintaining the tanks. Materials must be added to the tank in a manner that minimizes emissions.
   (1) The owner or operator shall inspect the tanks quarterly to ensure all ports are closed. The facility shall document the results of the inspection.

C. For all VOC containing materials used in Building 37 Processing Plant, the owner or operator shall record and document the materials used.
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials processed, used, or generated, in the Building 37 Processing Plant.

D. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

Recordkeeping for the Building 37 Processing Plant VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in emission limit section of this permit for the Building 37 Processing Plant. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points 37-1, 37-2, 37-3, and 37-4; those listed in the permits for Building 37 – Interior VOC Emissions, as well as those from miscellaneous sources related to B37 production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The limit also covers VOC emissions from storing materials from B37 in the storage tanks in buildings B11, B39 and B42, and packaging and loadout in buildings B11, B14, B39 and B42. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the Building 37 Processing Plant:
Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

E. For each product produced in the Building 37 Processing Plant, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

1. The permittee shall identify and document each product produced.
2. The permittee shall identify and document each standard and nonstandard batch used to produce each product.
3. The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition DE.5. The facility shall document and provide a justification for the value for each input used.
4. The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
5. The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.
   a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.
b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

F. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition EED.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.
G. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
(2) The daily number of standard or nonstandard batches completed for each product produced.

H. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

I. If the 12-month rolling total of the VOC emissions exceeds 13.5 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in emission limit section of this permit drops below 13.5 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 13.5 tons, daily recordkeeping will be required per this Condition of this permit.

**NSPS and NESHAP Requirements**

J. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

K. All batch process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the Building 37 Processing Plant) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

(3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525 (e)(1) through (3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
   a. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
   b. A record of whether each batch operated was considered a standard batch.
   c. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
   d. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

L. Any continuous process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2455 (b), for each continuous process vent in the Building 37 Processing Plant, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).

M. The material stored in the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.
(1) The owner or operator shall determine and document the group status for the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

N. The facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the group status for the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

O. Any wastewater streams that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.

(1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

P. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

Q. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the Building 37 Processing Plant.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 02-A-727-S2

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 02-A-727-S2
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 11.5
Stack Opening, (inches, dia.): 3
Exhaust Flow Rate (scfm): Displacement
Exhaust Temperature (°F): 70
Discharge Style: Downward
Authority for Requirement: DNR Construction Permit 02-A-727-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: B37-3

Associated Equipment

<table>
<thead>
<tr>
<th>EU ID</th>
<th>Description</th>
<th>Maximum Rated Capacity</th>
<th>Control Equipment Description and ID</th>
<th>Raw Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU37-TK872</td>
<td>B 37 Tank 872</td>
<td>8,000 Gallons</td>
<td>None</td>
<td>Herbicide</td>
</tr>
<tr>
<td>EU37-TK873</td>
<td>B 37 Tank 873</td>
<td>8,000 Gallons</td>
<td>None</td>
<td>Herbicide</td>
</tr>
</tbody>
</table>

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 17 tons/yr
Authority for Requirement: DNR Construction Permit 02-A-728-S1

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials used in Building 37 Processing Plant, the owner or operator shall record and document the materials used.
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials processed, used, or generated, in the Building 37 Processing Plant.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

**Recordkeeping for the Building 37 Processing Plant VOC Emission Cap**
The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in the emission limit section of this permit for the Building 37
Processing Plant. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points 37-1, 37-2, 37-3, and 37-4; those listed in the permits for Building 37 – Interior VOC Emissions, as well as those from miscellaneous sources related to B37 production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The limit also covers VOC emissions from storing materials from B37 in the storage tanks in buildings B11, B39 and B42, and packaging and loadout in buildings B11, B14, B39 and B42. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the Building 37 Processing Plant:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

D. For each product produced in the Building 37 Processing Plant, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

1. The permittee shall identify and document each product produced.
2. The permittee shall identify and document each standard and nonstandard batch used to produce each product.
3. The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition D.5. The facility shall document and provide a justification for the value for each input used.
4. The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
5. The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct
emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.
(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

E. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(8) The permittee shall use the operating scenarios required in Condition D.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

F. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
(2) The daily number of standard or nonstandard batches completed for each product produced.

G. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

H. If the 12-month rolling total of the VOC emissions exceeds 13.5 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission
limit cap in the emission limit section of this permit drops below 13.5 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 13.5 tons, daily recordkeeping will be required per this section of this permit.

**NSPS and NESHAP Requirements**

I. The facility shall keep readily accessible records showing the dimensions and capacity for the bulk storage tanks in B37.

J. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

K. All batch process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

   (1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

   (2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the Building 37 Processing Plant) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

   (3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525 (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:

      a. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.

      b. A record of whether each batch operated was considered a standard batch.

      c. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

      d. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

L. Any continuous process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

   (1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant and
document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2455 (b), for each continuous process vent in the Building 37 Processing Plant, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).

M. The material stored in the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the group status for the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

N. The facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the group status for the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

O. Any wastewater streams that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.

(1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

P. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

Q. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the Building 37 Processing Plant.

(1) The facility shall document all process changes and the results of all NSPS or
NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 02-A-728-S1

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 02-A-728-S1
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 13
Stack Opening, (inches, dia.): 3
Exhaust Flow Rate (scfm): Displacement
Exhaust Temperature (°F): 70
Discharge Style: Downward

Authority for Requirement: DNR Construction Permit 02-A-728-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 37-4

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 37-4

Emission Unit vented through this Emission Point: 37-4
Emission Unit Description: Building 37 Tank Farm (EU37-TK827 - EU37-TK868)
Raw Material/Fuel: Herbicide
Rated Capacity: 37,625 Gallons

Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 17 tons/yr
Authority for Requirement: DNR Construction Permit 02-A-729-S1

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only store materials for the Building 37 Processing Plant processing lines in the Building 37 (B37) tank farm.
   (1) For all materials stored in the tanks in the Building 37 (B37) tank farm, the owner or operator shall record and document the tank used, the material stored, the origins of the material (i.e. B37 processing line).
   (2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the tanks in the B37 tank farm.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall
be initiated promptly upon discovery.

Recordkeeping for the Building 37 Processing Plant VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in the emission limit section of this permit for the Building 37 Processing Plant. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points 37-1, 37-2, 37-3, and 37-4; those listed in the permits for Building 37 – Interior VOC Emissions, as well as those from miscellaneous sources related to B37 production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The limit also covers VOC emissions from storing materials from B37 in the storage tanks in buildings B11, B39 and B42, and packaging and loadout in buildings B11, B14, B39 and B42. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the Building 37 Processing Plant:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

D. For each product produced in the Building 37 Processing Plant, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product produced.
(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition D.5. The facility shall document and provide a justification for the value for each input used.
(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be
based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.
The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

E. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition D.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

F. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.

G. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

H. If the 12-month rolling total of the VOC emissions exceeds 13.5 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.
The total amount of VOC emissions for all products produced, in tons.

The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 13.5 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 13.5 tons, daily recordkeeping will be required per this section of this permit.

**NSPS and NESHAP Requirements**

I. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL), as defined in 40 CFR Part 51.100, stored in the bulk storage tanks in B37 shall be less than 15.0 kPa.

   (1) The facility shall keep readily accessible records showing the dimensions and capacity for the bulk storage tanks in B37.

   (2) The facility shall document the maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL) stored in the bulk storage tanks in B37.

   (3) The facility shall notify the Administrator within 30 days if the maximum true vapor pressure of the liquids stored in the bulk storage tanks in B37 exceeds 15.0 kPa.

J. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

K. All batch process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

   (1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

   (2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the Building 37 Processing Plant) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

   (3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs §
63.2525 (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:

a. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.

b. A record of whether each batch operated was considered a standard batch.

c. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

d. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

L. Any continuous process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2455 (b), for each continuous process vent in the Building 37 Processing Plant, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).

M. The material stored in the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the group status for the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

N. The facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the group status for the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

O. Any wastewater streams that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.
(1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

P. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

Q. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the Building 37 Processing Plant.  
(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement:  DNR Construction Permit 02-A-729-S1

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:  DNR Construction Permit 02-A-729-S1
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground):  13
Stack Opening, (inches, dia.):  6
Exhaust Flow Rate (scfm): Displacement
Exhaust Temperature (°F):  70
Discharge Style: Downward
Authority for Requirement:  DNR Construction Permit 02-A-729-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within
thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?**  Yes ☐ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?**  Yes ☐ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?**  Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
## Emission Point ID Number: Building 37 Process Line

### Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP37-BoxA</td>
<td>EU37-BoxA</td>
<td>B37 Box Tank for System A Screen</td>
<td>34 gallons</td>
<td>None</td>
<td>18-A-018</td>
</tr>
<tr>
<td>EP37-ScreenA</td>
<td>EU37-ScreenA</td>
<td>B37 Vibratory Screener System A</td>
<td>8 gallons/min</td>
<td>None</td>
<td>18-A-019</td>
</tr>
<tr>
<td>EP37-BoxC</td>
<td>EU37-BoxC</td>
<td>B37 Box Tank for System C Screen</td>
<td>37.5 gallons</td>
<td>None</td>
<td>18-A-020</td>
</tr>
<tr>
<td>EP37-ScreenC</td>
<td>EU37-ScreenC</td>
<td>B37 Vibratory Screener System C</td>
<td>8 gallons/min</td>
<td>None</td>
<td>18-A-021</td>
</tr>
<tr>
<td>EP37-Pack</td>
<td>EU37-Pack</td>
<td>B37 Packaging</td>
<td>55 gallons</td>
<td>None</td>
<td>18-A-022</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>----------------------------------</td>
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<td>----------</td>
</tr>
<tr>
<td>EP-TK884-SA</td>
<td>EU-TK884-SA</td>
<td>B37 Tank 884 Tank Solids Addition</td>
<td>1,000 lbs/hr</td>
<td>Dry Filters, CE-TK884</td>
<td>19-A-348</td>
</tr>
<tr>
<td>EP37-DH</td>
<td>EU37-DH</td>
<td>B37 Drum Heating</td>
<td>7,300,000 gallons/yr</td>
<td>None</td>
<td>19-A-351</td>
</tr>
<tr>
<td>EP37-LO-1</td>
<td>EU37-LO-1</td>
<td>B37 Loadout 1</td>
<td>7,300,000 gallons/yr</td>
<td>None</td>
<td>18-A-023</td>
</tr>
<tr>
<td>EP37-LO-3</td>
<td>EU37-LO-3</td>
<td>B37 Loadout 3</td>
<td>7,300,000 gallons/yr</td>
<td>None</td>
<td>18-A-025</td>
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<tr>
<td>EP37-LO-4</td>
<td>EU37-LO-4</td>
<td>B37 Loadout 4</td>
<td>7,300,000 gallons/yr</td>
<td>None</td>
<td>18-A-026</td>
</tr>
<tr>
<td>EP37-LO-5</td>
<td>EU37-LO-5</td>
<td>B37 Loadout 5</td>
<td>7,300,000 gallons/yr</td>
<td>None</td>
<td>18-A-027</td>
</tr>
<tr>
<td>EP37-LO-6</td>
<td>EU37-LO-6</td>
<td>B37 Loadout 6</td>
<td>7,300,000 gallons/yr</td>
<td>None</td>
<td>18-A-028</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

**Combined Limits**
Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 17 tons/yr
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Limits Per Emission Point**
Pollutant: Opacity
Emission Limit(s): 40% \(^{(1)}\)
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permits Listed in Table: Associated Equipment

\(^{(1)}\) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or
equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM$_{2.5}$
Emission Limit(s): 0.10 lb/hr
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permits Listed in Table: Associated Equipment

Pollutant: PM$_{10}$
Emission Limit(s): 0.20 lb/hr
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permits Listed in Table: Associated Equipment

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.35 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permits Listed in Table: Associated Equipment

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements
A. All control and process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the control and process equipment for this process.

B. The permittee shall keep all ports and manways on the tanks in a closed position at all times when storing liquid materials other than when adding materials, measuring liquid heights, and cleaning or maintaining the tanks. Materials must be added to the tank in a manner that minimizes emissions.
   (1) The owner or operator shall inspect the tanks quarterly to ensure all ports and manways are closed. The facility shall document the results of the inspection.

C. For all VOC containing materials used in Building 37 Processing Plant, the owner or operator shall record and document the materials used.
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials
processed, used, or generated, in the Building 37 Processing Plant.

D. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

Recordkeeping for the Building 37 Processing Plant VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in emission limit section of this permit for the Building 37 Processing Plant. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points 37-1, 37-2, 37-3, and 37-4; those listed in the permits for Building 37 – Interior VOC Emissions, as well as those from miscellaneous sources related to B37 production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The limit also covers VOC emissions from storing materials from B37 in the storage tanks in buildings B11, B39 and B42, and packaging and loadout in buildings B11, B14, B39 and B42. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the Building 37 Processing Plant:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

E. For each product produced in the Building 37 Processing Plant, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition ED.5. The facility shall document and provide a justification for the value for each input used.
(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.
g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit. The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

F. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition E.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

G. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
(2) The daily number of standard or nonstandard batches completed for each product produced.

H. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

I. If the 12-month rolling total of the VOC emissions exceeds 13.5 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in Condition 1 of this permit drops below 13.5 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 13.5 tons, daily recordkeeping will be required per this Condition of this permit.

**NSPS and NESHAP Requirements**

J. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

K. All batch process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.
   (2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the Building 37 Processing Plant) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).
   (3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525 (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
      a. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
      b. A record of whether each batch operated was considered a standard batch.
      c. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
      d. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

L. Any continuous process vents that are part of the miscellaneous organic chemical process
unit for the Building 37 Processing Plant shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2455 (b), for each continuous process vent in the Building 37 Processing Plant, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).

M. The material stored in the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the group status for the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

N. The facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the group status for the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

O. Any wastewater streams that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.

(1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

P. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.
Q. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the Building 37 Processing Plant.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

40 CFR 63 Subpart FFFF
567 IAC 23.1(4) "cf"

**Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: B37-EL

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): B37-EL

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Emission Unit vented through this Emission Point: B37-EL
Emission Unit Description: Building 37 Equipment Leaks
Raw Material/Fuel: Herbicide
Rated Capacity: N/A

Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permit 18-A-005

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**
A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   1. The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials handled in the Building 37 (B37) equipment, the owner or operator shall record and document the material handled and the origins of the material (i.e. B37 processing lines).
   1. The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials handled in the B39 equipment.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
D. The equipment used in Building 37 shall have a maximum of 885 heavy liquid valves, 69 heavy liquid pumps, 5816 connectors, and 27 heavy liquid sample connections. The process shall not use any light liquid components, gas valves, open-ended lines, compressors, agitators, or pressure relief valves. This shall include all of the equipment used in Building 37 to handle any VOC-containing material.

(1) The owner or operator shall count and document the number and types of components used in Building 37. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall update the component count whenever the number of components change.

NSPS and NESHAP Requirements

E. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

F. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in in the referenced subparts F, H, or UU.

(1) The permittee shall document the subpart they are complying with, and meet all of the applicable requirements as specified in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the permittee is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1019 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the permittee shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed.

G. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in Building 37.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 18-A-005
NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 18-A-005
40 CFR 63 Subpart FFFF
567 IAC 23.1(4) "cf"

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes □ No ☒
Facility Maintained Operation & Maintenance Plan Required? Yes □ No ☒
Compliance Assurance Monitoring (CAM) Plan Required? Yes □ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 37-HR

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 37-HR

Emission Unit vented through this Emission Point: 37-HR
Emission Unit Description: Building 37 Haul Roads
Raw Material/Fuel: Herbicide
Rated Capacity: N/A

Applicable Requirements

Emission Limits (lb./hr, gr./dsfc, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: DNR Construction Permit 18-A-017
567 IAC 23.3(2)"c"

Pollutant: PM_{10}
Emission Limit(s): 5 tons/yr
Authority for Requirement: DNR Construction Permit 18-A-017

Pollutant: PM_{2.5}
Emission Limit(s): 1 tons/yr
Authority for Requirement: DNR Construction Permit 18-A-017

Pollutant: Particulate Matter
Emission Limit(s): 18 tons/yr
Authority for Requirement: DNR Construction Permit 18-A-017

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an
orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The owner or operator shall document each haul road route used for Building 37 Processing Plant along with the length of each route.

B. The owner or operator shall record each time a truck uses a route for the Building 37 Processing Plant.

C. The owner or operator shall record on a monthly basis:
   (1) The number of trips taken on each haul road route.
   (2) The total vehicle miles (VMT) travelled for all trucks used for the Building 37 Processing Plant. This shall be accomplished by multiplying the number of trips taken on each haul road route by the distance of the corresponding route and summing the results.
   (3) The maximum average truck weight of vehicles used for the Building 37 Processing Plant (the maximum average truck weight is the average of a full and empty truck for the heaviest truck used for the Building 37 Processing Plant).

D. The owner/operator shall calculate and record the monthly PM, PM-10, and PM-2.5 emissions for Area 46 truck traffic according to the formulas and procedures from AP-42 Section 13.2.1 using the data documented above and the surface silt-loading (sL) limit as specified in the Facility-wide Haul Road Traffic permit for the road surface silt loading. The owner or operator shall update monthly the twelve-month rolling total of PM, PM-10, and PM-2.5 emissions by adding up the calculated monthly emissions for the previous twelve months.

E. The haul roads covered under this permit are required to employ best management practices to reasonably prevent the discharge of fugitive dust from all haul roads beyond the lot line of the property on which it is located. These BMP are examples of reasonable practices to minimize the generation of fugitive dust emissions.

BMP on haul roads include but are not limited to:
- Limiting truck speed on facility property
- Watering and/or sweeping paved roadways
- Immediately cleaning-up or dampening all material spills on the roadways

(1) The owner or operator shall document all best management practices used at the facility to minimize fugitive dust emissions.

Authority for Requirement: DNR Construction Permit 18-A-017
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?**  Yes ☐ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?**  Yes ☐ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?**  Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number: 37-TK882BBS**

**Associated Equipment**

**Associated Emission Unit ID Numbers** *(if multiple units vent thru this EP):* 37-TK882BBS  
Emissions Control Equipment ID Number: CE37-TK882  
Emissions Control Equipment Description: Baghouse  
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: 37-TK882BBS  
Emission Unit Description: Building 37 Tank 882 Batching Station  
Raw Material/Fuel: Herbicide  
Rated Capacity: 1,000 lbs/hr

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**  
The emissions from this emission point shall not exceed the levels specified below.

**Pollutant:** Opacity  
Emission Limit(s): 40% **(1)**  
Authority for Requirement: 567 IAC 23.3(2)"d"  
DNR Construction Permit 18-A-001

**Pollutant:** Particulate Matter (PM)  
Emission Limit(s): 0.05 lb/hr, 0.1 gr/dscf  
Authority for Requirement: 567 IAC 23.3(2)"a"  
DNR Construction Permit 18-A-001

**Pollutant:** Volatile Organic Compounds (VOC)  
Emission Limit(s): 17 tons/yr  
Authority for Requirement: DNR Construction Permit 18-A-001

**Operating Requirements with Associated Monitoring and Recordkeeping**  
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:
General Operating Limits and Recordkeeping Requirements
A. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

B. All process and control equipment for the Building 37 Processing Plant shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

C. The permittee shall employ good housekeeping practices for the Building 37 Processing Plant. Cleanup of liquid spills shall be initiated promptly upon discovery.

Recordkeeping for the Building 37 Processing Plant VOC Emission Cap
The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in the emission limit section of this permit for the Building 37 Processing Plant. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points 37-1, 37-2, 37-3, and 37-4; those listed in the permits for Building 37 – Interior VOC Emissions, as well as those from miscellaneous sources related to B37 production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The limit also covers VOC emissions from storing materials from B37 in the storage tanks in buildings B11, B39 and B42, and packaging and loadout in buildings B11, B14, B39 and B42. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the Building 37 Processing Plant:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

D. For each product produced in the Building 37 Processing Plant, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.

(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition D.5. The facility shall document and provide a justification for the value for each input used.

(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.
e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

E. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition D.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

F. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.

G. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

H. If the 12-month rolling total of the VOC emissions exceeds 13.5 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 13.5 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 13.5 tons, daily recordkeeping will be required per this section of this permit.

NSPS and NESHAP Requirements

I. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing—Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

J. All batch process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the Building 37 Processing Plant) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

(3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525 (e)(1) through e(3) is met, the owner or operator must keep records of the
information specified in paragraphs (e)(4)(i) through (iv), as applicable:

a. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
b. A record of whether each batch operated was considered a standard batch.
c. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
d. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

K. Any continuous process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2455 (b), for each continuous process vent in the Building 37 Processing Plant, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).

L. The material stored in the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the group status for the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

M. The facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the group status for the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

N. Any wastewater streams that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.

(1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525,
and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

O. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

P. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the Building 37 Processing Plant.
   (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement:   DNR Construction Permit 18-A-001

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:   DNR Construction Permit 18-A-001
   40 CFR 63 Subpart FFFF
   567 IAC 23.1(4)"cf"

**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground):  Vents Indoors  
Stack Opening, (inches, dia.):  Vents Indoors  
Exhaust Flow Rate (scfm):  650  
Exhaust Temperature (°F):  70  
Discharge Style:  Vents Indoors  
Authority for Requirement:   DNR Construction Permit 18-A-001

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>Agency Approved Operation &amp; Maintenance Plan Required?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
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</tbody>
</table>

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 37-TK883BBS

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 37-TK883BBS
Emissions Control Equipment ID Number: CE37-TK883
Emissions Control Equipment Description: Baghouse
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: 37-TK883BBS
Emission Unit Description: Building 37 Tank 883 Batching Station
Raw Material/Fuel: Herbicide
Rated Capacity: 1,000 lbs/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 18-A-002

(2) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.05 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 18-A-002

Pollutant: Volatile Organic Compounds
Emission Limit(s): 17 tons/yr
Authority for Requirement: DNR Construction Permit 18-A-002

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:
General Operating Limits and Recordkeeping Requirements

A. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

B. All process and control equipment for the Building 37 Processing Plant shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

C. The permittee shall employ good housekeeping practices for the Building 37 Processing Plant. Cleanup of liquid spills shall be initiated promptly upon discovery.

Recordkeeping for the Building 37 Processing Plant VOC Emission Cap
The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in the emission limit section of this permit for the Building 37 Processing Plant. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points 37-1, 37-2, 37-3, and 37-4; those listed in the permits for Building 37 – Interior VOC Emissions, as well as those from miscellaneous sources related to B37 production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The limit also covers VOC emissions from storing materials from B37 in the storage tanks in buildings B11, B39 and B42, and packaging and loadout in buildings B11, B14, B39 and B42. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the Building 37 Processing Plant:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

D. For each product produced in the Building 37 Processing Plant, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.

(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition D.5. The facility shall document and provide a justification for the value for each input used.

(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.
a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.
b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).
c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.
d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.
e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in §63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

E. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition D.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

F. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
(2) The daily number of standard or nonstandard batches completed for each product produced.

G. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

H. If the 12-month rolling total of the VOC emissions exceeds 13.5 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 13.5 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 13.5 tons, daily recordkeeping will be required per this section of this permit.

NSPS and NESHAP Requirements
I. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

J. All batch process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
(1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.
(2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the Building 37 Processing Plant) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).
(3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525 (e)(1) through e(3) is met, the owner or operator must keep records of the
information specified in paragraphs (e)(4)(i) through (iv), as applicable:

a. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
b. A record of whether each batch operated was considered a standard batch.
c. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
d. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

K. Any continuous process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.
   (2) As specified in § 63.2455 (b), for each continuous process vent in the Building 37 Processing Plant, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).

L. The material stored in the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall determine and document the group status for the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

M. The facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall determine and document the group status for the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

N. Any wastewater streams that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.
   (1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525,
and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

O. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

P. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the Building 37 Processing Plant.
(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 18-A-002

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 18-A-002

40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): Vents Indoors
Stack Opening, (inches, dia.): Vents Indoors
Exhaust Flow Rate (scfm): 650
Exhaust Temperature (°F): 70
Discharge Style: Vents Indoors
Authority for Requirement: DNR Construction Permit 18-A-002

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.>*

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number:** 37-TK995BBS

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**Associated Equipment**

**Associated Emission Unit ID Numbers** (if multiple units vent thru this EP): 37-TK995BBS

Emissions Control Equipment ID Number: CE37-TK995

Emissions Control Equipment Description: Baghouse

Continuous Emissions Monitors ID Numbers: N/A

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Emission Unit vented through this Emission Point: 37-TK995BBS

Emission Unit Description: Building 37 Tank 995 Batching Station

Raw Material/Fuel: Herbicide

Rated Capacity: 1,000 lbs/hr

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**Applicable Requirements**

**Emission Limits (lb/hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

**Pollutant:** Opacity

**Emission Limit(s):** 40% (1)

**Authority for Requirement:** 567 IAC 23.3(2)"d"

DNR Construction Permit 18-A-003

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(3) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

**Pollutant:** Particulate Matter (PM)

**Emission Limit(s):** 0.05 lb/hr, 0.1 gr/dscf

**Authority for Requirement:** 567 IAC 23.3(2)"a"

DNR Construction Permit 18-A-003

**Pollutant:** Volatile Organic Compounds

**Emission Limit(s):** 17 tons/yr

**Authority for Requirement:** DNR Construction Permit 18-A-003

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**Operating Requirements with Associated Monitoring and Recordkeeping**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:
General Operating Limits and Recordkeeping Requirements
A. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

B. All process and control equipment for the Building 37 Processing Plant shall be operated and maintained according to manufacturer specifications and maintenance schedule.
(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

C. The permittee shall employ good housekeeping practices for the Building 37 Processing Plant. Cleanup of liquid spills shall be initiated promptly upon discovery.

Recordkeeping for the Building 37 Processing Plant VOC Emission Cap
The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in the emission limit section of this permit for the Building 37 Processing Plant. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points 37-1, 37-2, 37-3, and 37-4; those listed in the permits for Building 37 – Interior VOC Emissions, as well as those from miscellaneous sources related to B37 production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The limit also covers VOC emissions from storing materials from B37 in the storage tanks in buildings B11, B39 and B42, and packaging and loadout in buildings B11, B14, B39 and B42. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the Building 37 Processing Plant:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

D. For each product produced in the Building 37 Processing Plant, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
(1) The permittee shall identify and document each product produced.
(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.

(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition D.5. The facility shall document and provide a justification for the value for each input used.

(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.
e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

E. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition D.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

F. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.

G. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

H. If the 12-month rolling total of the VOC emissions exceeds 13.5 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 13.5 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 13.5 tons, daily recordkeeping will be required per this section of this permit.

NSPS and NESHAP Requirements

I. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

J. All batch process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.
   (2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the Building 37 Processing Plant) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).
   (3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525 (e)(1) through e(3) is met, the owner or operator must keep records of the
information specified in paragraphs (e)(4)(i) through (iv), as applicable:

a. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
b. A record of whether each batch operated was considered a standard batch.
c. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
d. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

K. Any continuous process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.
   (2) As specified in § 63.2455 (b), for each continuous process vent in the Building 37 Processing Plant, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).

L. The material stored in the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall determine and document the group status for the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

M. The facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall determine and document the group status for the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

N. Any wastewater streams that are part of the miscellaneous organic chemical process unit for the Building 37 Processing Plant shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.
   (1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525,
and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

O. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

P. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the Building 37 Processing Plant.
(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 18-A-003

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 18-A-003
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): Vents Indoors
- Stack Opening, (inches, dia.): Vents Indoors
- Exhaust Flow Rate (scfm): 650
- Exhaust Temperature (°F): 70
- Discharge Style: Vents Indoors

Authority for Requirement: DNR Construction Permit 18-A-003

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Building 39 Loadouts

Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP39-LO-1</td>
<td>EU39-LO-1</td>
<td>B39 Loadout 1</td>
<td>18,000 gallons/hr</td>
<td>None</td>
<td>18-A-009</td>
</tr>
<tr>
<td>EP39-LO-3</td>
<td>EU39-LO-3</td>
<td>B39 Loadout 3</td>
<td>18,000 gallons/hr</td>
<td>None</td>
<td>18-A-011</td>
</tr>
<tr>
<td>EP39-LO-4</td>
<td>EU39-LO-4</td>
<td>B39 Loadout 4</td>
<td>18,000 gallons/hr</td>
<td>None</td>
<td>18-A-012</td>
</tr>
<tr>
<td>EP39-LO-5</td>
<td>EU39-LO-5</td>
<td>B39 Loadout 5</td>
<td>18,000 gallons/hr</td>
<td>None</td>
<td>18-A-013</td>
</tr>
<tr>
<td>EP39-LO-6</td>
<td>EU39-LO-6</td>
<td>B39 Loadout 6</td>
<td>18,000 gallons/hr</td>
<td>None</td>
<td>18-A-014</td>
</tr>
<tr>
<td>EP39-LO-7</td>
<td>EU39-LO-7</td>
<td>B39 Loadout 7</td>
<td>18,000 gallons/hr</td>
<td>None</td>
<td>18-A-015</td>
</tr>
<tr>
<td>EP39-LO-8</td>
<td>EU39-LO-8</td>
<td>B39 Loadout 8</td>
<td>18,000 gallons/hr</td>
<td>None</td>
<td>18-A-016</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 17 tons/yr
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.

(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.
B. The owner or operator shall only store and loadout materials for Building 37 Processing Plant and from packaging and bulk terminal operations in the tanks in the Building 39 (B39) tank farm.

(1) For all materials stored in the tanks in the Building 39 (B39) tank farm, the owner or operator shall record and document the tank used, the material stored, the origins of the material (i.e. B37 processing lines, packaging and bulk terminal operations) and amount of VOC-containing material stored.

(2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the tanks in the B39 tank farm.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

Recordkeeping for the Building 37 Processing Plant VOC Emission Cap
The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in the emission limit section of this permit for the Building 37 Processing Plant. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points 37-1, 37-2, 37-3, and 37-4; those listed in the permits for Building 37 – Interior VOC Emissions, as well as those from miscellaneous sources related to B37 production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The limit also covers VOC emissions from storing materials from B37 in the storage tanks in buildings B11, B39 and B42, and packaging and loadout in buildings B11, B14, B39 and B42. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the Building 37 Processing Plant:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Storage Tanks
- Gas Sweep
- Solids Handling
- Evaporation from Screens and Open Tanks
- Heating
- Ancillary Packaging Emissions - Ink Jet & Stenciling
- Laboratory Emissions
- Tank Cleaning Emissions
- Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

D. For each product produced in the Building 37 Processing Plant, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product produced.

(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition D.5. The facility shall document and provide a justification for the value for each input used.

(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as
described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

E. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition D.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

F. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.

G. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

H. If the 12-month rolling total of the VOC emissions exceeds 13.5 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 13.5 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 13.5 tons, daily recordkeeping will be required per this section of this permit.

Conditions for product loadout for the packaging and bulk terminal operations

I. Packaging and bulk terminal operations shall include receiving, storing, processing, and loading activities involving materials that are not produced in a specific processing line at the plant (i.e. B37, etc.). These materials are brought to the facility, stored, processed, and then packaged in containers or drums or loaded into tankers or railcars and transferred off site.

J. The amount of VOC-containing material for the packaging and bulk terminal operations loaded out (transferred) in the B39 Product Tanker Loadouts (EP-B39-LO-1-8) shall not exceed 175.0 Million Gallons per rolling twelve-month period.
   (1) The permittee shall maintain the following monthly records for all VOC-containing material for the packaging and bulk terminal operations transferred in emission units EP-B39-LO-1-8:
      a) The identification and origins of each VOC-containing material transferred;
      b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material transferred;
      c) the amount of VOC-containing material transferred;
      d) the twelve month total rolling total of VOC-containing material transferred.

K. The maximum total HAP content of any material loaded out (transferred) in the B39 Product Tanker Loadout (EP-B39-LO-1-8) for bulk terminal operations shall be 80.0%, by weight. The maximum individual HAP content of any material loaded out (transferred) in the B39 tank farm for bulk terminal operations shall be 30.0%, by weight.
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials loaded out (transferred) in the B39 Product Tanker Loadout (EP-B39-LO-1-8) for bulk terminal operations.

L. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations loaded out (transferred) in the B39 Product Tanker Loadout (EP-B39-LO-1-8) and the shall be less than 10.0 psia · lb/lb · mol.
(1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations transferred in emission units EU- B39-LO-1-8.

**NSPS and NESHAP Requirements**

**M.** The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

**N.** The owner or operator shall determine and document which transfer racks covered under this permit are subject to 40 CFR Part 63 Subpart FFFF, and, if subject, which miscellaneous organic chemical process unit (MCPU) the transfer rack is assigned, using the procedures in §63.2435 (d), if applicable.

**O.** The facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of a miscellaneous organic chemical process unit, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the group status for the transfer racks that are part of a miscellaneous organic chemical process unit, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

**P.** As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

**Q.** The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the loadouts in B39.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment
NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment 40 CFR 63 Subpart FFFF 567 IAC 23.1(4)"cf"

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☑
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☑
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☑

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: B39-EL

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): B39-EL

Emission Unit vented through this Emission Point: B39-EL
Emission Unit Description: Building 39 Equipment Leaks
Raw Material/Fuel: Herbicide
Rated Capacity: N/A

Applicable Requirements

Emission Limits (lb./hr, gr./dsf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permit 18-A-006

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials handled in the Building 39 (B39) equipment, the owner or operator shall record and document the material handled and the origins of the material (i.e. B37 processing lines, bulk terminal materials).
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials handled in the B39 equipment.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
D. The equipment used in the B39 tank farm and the associated loadouts shall have a maximum of 425 heavy liquid valves, 9 heavy liquid pumps, 8 sample connections and 2506 heavy liquid connectors. The process shall not use any light liquid components, gas valves, compressors, agitators, open-ended lines, or pressure relief valves. This shall include all of the equipment used in the B39 tank farm and the associated loadouts to handle any VOC-containing material.

(1) The owner or operator shall count and document the number and types of components used in Building 39. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

NSPS and NESHAP Requirements

E. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

F. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in the referenced subparts F, H, or UU.

(1) The permittee shall document the subpart they are complying with, and meet all of the applicable requirements as specified in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the permittee is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1019 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the permittee shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed.

G. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in Building 39.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 18-A-006
**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 18-A-006
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?  Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: B39-TF-

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): TK917 – TK946

Emission Unit vented through this Emission Point: TK917 – TK946
Emission Unit Description: Building 39 Tank Farm East
Raw Material/Fuel: Herbicide
Rated Capacity: 33,372 Gallons

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 17 tons/yr
Authority for Requirement: DNR Construction Permit 18-A-007

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

General Operating Limits and Recordkeeping Requirements
A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only store materials for Building 37 (B37) and from packaging and bulk terminal operations in the tanks in the Building 39 (B39) tank farm.
   (1) For all materials stored in the tanks in the Building 39 (B39) tank farm, the owner or operator shall record and document the tank used, the material stored, the origins of the material (i.e. B37 processing lines, packaging and bulk terminal operations) and amount of VOC-containing material stored.
   (2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the tanks in the B39 tank farm.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
Recordkeeping for the Building 37 Processing Plant VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in the emission limit section of this permit for the Building 37 Processing Plant. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points 37-1, 37-2, 37-3, and 37-4; those listed in the permits for Building 37 – Interior VOC Emissions, as well as those from miscellaneous sources related to B37 production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The limit also covers VOC emissions from storing materials from B37 in the storage tanks in buildings B11, B39 and B42, and packaging and loadout in buildings B11, B14, B39 and B42. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the Building 37 Processing Plant:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Storage Tanks
- Gas Sweep
- Solids Handling
- Evaporation from Screens and Open Tanks
- Heating
- Ancillary Packaging Emissions - Ink Jet & Stenciling
- Laboratory Emissions
- Tank Cleaning Emissions
- Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

D. For each product produced in the Building 37 Processing Plant, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   1. The permittee shall identify and document each product produced.
   2. The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   3. The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition D.5. The facility shall document and provide a justification for the value for each input used.
   4. The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
   5. The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission
testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(1) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.
(2) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

E. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.
   (1) The permittee shall use the operating scenarios required in Condition D.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

F. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
   (2) The daily number of standard or nonstandard batches completed for each product produced.

G. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

H. If the 12-month rolling total of the VOC emissions exceeds 13.5 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 13.5 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 13.5 tons, daily recordkeeping will be required per this section of this permit.
Conditions for storing materials for the bulk terminal operations

I. Bulk terminal operations shall include receiving, storing, and loading activities involving materials not produced in a specific processing line at the plant (i.e. B37). These materials are brought to the facility, stored, and then packaged (containers, drums) or loaded into tankers or railcars and transferred off site.

J. The amount of VOC-containing material for the bulk terminal operations stored in all of the tanks in B39 tank farm shall not exceed 175.0 Million Gallons per rolling twelve-month period.
   (1) The permittee shall maintain the following monthly records for all VOC-containing material for the bulk terminal operations stored in the tanks in B39 tank farm:
      a) The identification and origins of each VOC-containing material;
      b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
      c) the amount of VOC-containing material stored;
      d) the twelve month total rolling total of VOC-containing material process stored.

K. The maximum total HAP content of any material stored in the B39 tank farm for bulk terminal operations shall be 80.0%, by weight. The maximum individual HAP content of any material stored in the B39 tank farm for bulk terminal operations shall be 30.0%, by weight.
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials stored in the B39 tank farm for bulk terminal operations.

L. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations stored in the tanks in B39 tank farm shall be less than 10.0 psia ∙ \frac{lb}{lb\cdot mol}
   (1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations stored in the tanks in B39 tank farm.

NSPS and NESHAP Requirements

M. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL), as defined in 40 CFR Part 51.100, stored in the bulk storage tanks in B39 shall be less than 15.0 kPa.
   (1) The facility shall keep readily accessible records showing the dimensions and capacity for the bulk storage tanks in B39.
   (2) The facility shall document the maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL) stored in the bulk storage tanks in B39.
   (3) The facility shall notify the Administrator within 30 days if the maximum true vapor pressure of the liquids stored in the bulk storage tanks in B39 exceeds 15.0 kPa.

N. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

O. The owner or operator shall determine and document which storage tanks covered under this permit is subject to 40 CFR Part 63 Subpart FFFF, and, if subject, to which miscellaneous organic chemical process unit (MCPU) the tank is assigned, using the procedures in § 63.2435 (d), if applicable.

P. The material stored in the storage tanks that are part of the miscellaneous organic chemical process unit with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.
(1) The owner or operator shall determine and document the group status for the storage tanks that are part of a miscellaneous organic chemical process unit, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

Q. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

R. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the storage tanks in B39.
(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 18-A-007

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 18-A-007
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 11.5
Stack Opening, (inches, dia.): 4
Exhaust Flow Rate (scfm): Displacement
Exhaust Temperature (°F): 70
Discharge Style: Downward

Authority for Requirement: DNR Construction Permit 18-A-007

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number: B39-TF-W**

**Associated Equipment**

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): TK907 – TK916

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Emission Unit vented through this Emission Point: TK917 – TK946
Emission Unit Description: Building 39 Tank Farm West
Raw Material/Fuel: Herbicide
Rated Capacity: 33,372 Gallons

**Applicable Requirements**

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 17 tons/yr
Authority for Requirement: DNR Construction Permit 18-A-008

**Operating Requirements with Associated Monitoring and Recordkeeping**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only store materials for Building 37 (B37) and from packaging and bulk terminal operations in the tanks in the Building 39 (B39) tank farm.
   (1) For all materials stored in the tanks in the Building 39 (B39) tank farm, the owner or operator shall record and document the tank used, the material stored, the origins of the material (i.e. B37 processing lines, packaging and bulk terminal operations) and amount of VOC-containing material stored.
   (2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the tanks in the B39 tank farm.
C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

Recordkeeping for the Building 37 Processing Plant VOC Emission Cap
The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in the emission limit section of this permit for the Building 37 Processing Plant. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points 37-1, 37-2, 37-3, and 37-4; those listed in the permits for Building 37 – Interior VOC Emissions, as well as those from miscellaneous sources related to B37 production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The limit also covers VOC emissions from storing materials from B37 in the storage tanks in buildings B11, B39 and B42, and packaging and loadout in buildings B11, B14, B39 and B42. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the Building 37 Processing Plant:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

D. For each product produced in the Building 37 Processing Plant, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition D.5. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
   (5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee
according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.
(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

E. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition D.3 above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

F. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.

G. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

H. If the 12-month rolling total of the VOC emissions exceeds 13.5 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 13.5 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC
emissions will cease per this section of this permit. If the emissions once again exceed 13.5 tons, daily recordkeeping will be required per this section of this permit.

Conditions for storing materials for the bulk terminal operations

I. Bulk terminal operations shall include receiving, storing, and loading activities involving materials not produced in a specific processing line at the plant (i.e. B37). These materials are brought to the facility, stored, and then packaged (containers, drums) or loaded into tankers or railcars and transferred off site.

J. The amount of VOC-containing material for the bulk terminal operations stored in all of the tanks in B39 tank farm shall not exceed 175.0 Million Gallons per rolling twelve-month period.

   (1) The permittee shall maintain the following monthly records for all VOC-containing material for the bulk terminal operations stored in the tanks in B39 tank farm:
      a) The identification and origins of each VOC-containing material;
      b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material stored;
      c) the amount of VOC-containing material stored;
      d) the twelve month total rolling total of VOC-containing material process stored.

K. The maximum total HAP content of any material stored in the B39 tank farm for bulk terminal operations shall be 80.0%, by weight. The maximum individual HAP content of any material stored in the B39 tank farm for bulk terminal operations shall be 30.0%, by weight.

   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials stored in the B39 tank farm for bulk terminal operations.

L. The product of the true vapor pressure and the molecular weight of each VOC-containing material for the bulk terminal operations stored in the tanks in B39 tank farm shall be less than 10.0 psia \cdot \frac{lb}{lb=mo1}

   (1) The facility shall document the product of the true vapor pressure and the molecular weight of each VOC-containing material for the packaging and bulk terminal operations stored in the tanks in B39 tank farm.

NSPS and NESHAP Requirements

M. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL), as defined in 40 CFR Part 51.100, stored in the bulk storage tanks in B39 shall be less than 15.0 kPa.

   (1) The facility shall keep readily accessible records showing the dimensions and capacity for the bulk storage tanks in B39.

   (2) The facility shall document the maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL) stored in the bulk storage tanks in B39.

   (3) The facility shall notify the Administrator within 30 days if the maximum true vapor pressure of the liquids stored in the bulk storage tanks in B39 exceeds 15.0 kPa.
N. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

O. The owner or operator shall determine and document which storage tanks covered under this permit is subject to 40 CFR Part 63 Subpart FFFF, and, if subject, to which miscellaneous organic chemical process unit (MCPU) the tank is assigned, using the procedures in § 63.2435 (d), if applicable.

P. The material stored in the storage tanks that are part of the miscellaneous organic chemical process unit with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the group status for the storage tanks that are part of a miscellaneous organic chemical process unit, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

Q. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

R. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the storage tanks in B39.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 18-A-008

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 18-A-008
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): 12
- Stack Opening, (inches, dia.): 5
- Exhaust Flow Rate (scfm): Displacement
- Exhaust Temperature (°F): 70
- Discharge Style: Downard

**Authority for Requirement:** DNR Construction Permit 18-A-007

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☐ No ☒

**Authority for Requirement:** 567 IAC 22.108(3)
### Emission Point ID Number: Building 40 Storage Tanks

#### Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
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<td>EP-TK-958</td>
<td>TK-958</td>
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<td>TK-980</td>
<td>Building 40 Storage Tank</td>
<td>30,000 gallons 200 gallons/minute</td>
<td>None</td>
<td>19-A-309-S1</td>
</tr>
<tr>
<td>EP-TK-981</td>
<td>TK-981</td>
<td>Building 40 Storage Tank</td>
<td>30,000 gallons 200 gallons/minute</td>
<td>None</td>
<td>19-A-310-S1</td>
</tr>
<tr>
<td>TK-982</td>
<td>Building 40 Storage Tank</td>
<td>30,000 gallons 200 gallons/minute</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TK-983</td>
<td>Building 40 Storage Tank</td>
<td>30,000 gallons 200 gallons/minute</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TK-984</td>
<td>Building 40 Storage Tank</td>
<td>30,000 gallons 200 gallons/minute</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TK-985</td>
<td>Building 40 Storage Tank</td>
<td>30,000 gallons 200 gallons/minute</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TK-986</td>
<td>Building 40 Storage Tank</td>
<td>30,000 gallons 200 gallons/minute</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TK-987</td>
<td>Building 40 Storage Tank</td>
<td>30,000 gallons 200 gallons/minute</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TK-988</td>
<td>Building 40 Storage Tank</td>
<td>30,000 gallons 200 gallons/minute</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TK-989</td>
<td>Building 40 Storage Tank</td>
<td>30,000 gallons 200 gallons/minute</td>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide
Applicable Requirements

**Emission Limits (lb/hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 13 tons/yr\(^{(1)}\)
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

Pollutant: Single Hazardous Air Pollutant
Emission Limit(s): 0.80 tons/yr\(^{(2)}\)
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

Pollutant: Total Hazardous Air Pollutants
Emission Limit(s): 10 tons/yr\(^{(3)}\)
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment


**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

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**Notes:**

ZLP 429 21-TV-006, 11/23/21
General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The permittee shall keep all ports and manways on the tanks in a closed position at all times when storing liquid materials other than when adding materials, measuring liquid heights, and cleaning or maintaining the tanks. Materials must be added to the tank in a manner that minimizes emissions.
   (1) The owner or operator shall inspect the tanks quarterly to ensure all ports and manways are closed. The facility shall document the results of the inspection.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

Recordkeeping for the Area 46 VOC and HAP Emission Caps
The following monitoring and recordkeeping requirements are used to show compliance with the VOC, Single HAP, and Total HAP emission limit caps in the emission limit section of this permit. The Single HAP emissions are defined as the emissions of any individual HAP emitted by the emission episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF. The Total HAP emissions are defined as the sum of all Single HAP emitted by the episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF.


The VOC emission limit covers the following emission episodes from the emission units covered under this permit for the production of products made in the Area 46 process:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Drum Heating
Laboratory Emissions
Tank Cleaning Emissions
Tanker Cleaning Emissions
The HAP emission limits covers the following emission episodes from the emission units covered under this permit for the production of products made in Area 46:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Storage Tanks
- Gas Sweep
- Solids Handling
- Evaporation from Screens and Tank Evaporation
- Heating
- Process Tank Cleaning Emissions

The limit only covers emissions from units that are part of the miscellaneous organic chemical manufacturing process unit (MCPU) for Area 46 process as defined in the subpart.

The facility must keep the following records to show compliance with the emission limit caps:

D. For each product produced in the Area 46, that uses a VOC-containing or HAP-containing material, the permittee shall determine and record the VOC, Single HAP, and Total HAP emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition D.G.5. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
   (5) The permittee shall calculate and record the VOC, Single HAP, and Total HAP emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.
      a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16,
Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.
b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).
c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.
d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.
e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.
f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.
g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.
(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC, Single HAP, and Total HAP emission rate (tons/batch) by summing the emission rate of each emission episode.

E. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.
(1) The permittee shall use the operating scenarios required in Condition DG.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.
F. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC, Single HAP, and Total HAP ton per year emission limit caps in the emission limit section of this permit:
   (1) The identification of each VOC-containing or HAP-containing material processed,
       used, or generated; as required to calculate the VOC and HAP emissions for the
       emission limit caps.
   (2) The daily number of standard or nonstandard batches completed for each product
       produced.

G. The permittee shall maintain the following monthly records for all of the emission
   units/episodes covered by the VOC ton per year emission limit cap in the emission limit
   section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced
       and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products
       produced, in tons.

H. If the 12-month rolling total of the VOC emissions exceeds tons from all emission
   units/episodes covered by the VOC ton per year emission limit cap in the emission limit
   section of this permit., 10.4 the permittee shall immediately begin keeping the following
   daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced,
       in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount
of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in
Condition 1 of this permit drops below 10.4 tons for the remainder of the current calendar month
plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will
cease per this Condition of this permit. If the emissions once again exceed 10.4 tons, daily
recordkeeping will be required per this Condition of this permit.

I. The permittee shall maintain the following monthly records for all of the emission
   units/episodes covered by the Single HAP ton per year emission limit cap in the emission
   limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product
       produced and the corresponding Single HAP emissions, in tons.
   (2) The total amount of Single HAP emissions for each product produced, in tons.
   (3) The total amount of Single HAP emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of Single HAP emissions from all products produced, in tons.

J. If the 12-month rolling total of the Single HAP emissions exceeds 0.80 tons from all emission units/episodes covered by the Single HAP ton per year emission limit cap in Condition 1 of this permit., the permittee shall immediately begin keeping the following daily records:

1. The number of standard and nonstandard batches and the corresponding Single HAP emissions, for each product produced, in tons.
2. The total amount of Single HAP emissions for each product produced, in tons.
3. The total amount of Single HAP emissions for all products produced, in tons.
4. The 365-day rolling total of the amount of Single HAP emissions from all products produced, in tons.

Daily calculations for Single HAP emissions shall continue until the 365-day rolling total of the amount of Single HAP emissions from all emission units covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit drops below 0.80 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Single HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 0.80 tons, daily recordkeeping will be required per this Condition of this permit.

K. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit:

1. The number of standard and nonstandard batches completed for each product produced and the corresponding Total HAP emissions, in tons.
2. The total amount of Total HAP emissions for each product produced, in tons.
3. The total amount of Total HAP emissions for all products produced, in tons.
4. The 12-month rolling total of the amount of Total HAP emissions from all products produced, in tons.

L. If the 12-month rolling total of the Total HAP emissions exceeds 8.0 tons from all emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

1. The number of standard and nonstandard batches and the corresponding Total HAP emissions, for each product produced, in tons.
2. The total amount of Total HAP emissions for each product produced, in tons.
3. The total amount of Total HAP emissions for all products produced, in tons.
4. The 365-day rolling total of the amount of Total HAP emissions from all products produced, in tons.
Daily calculations for Total HAP emissions shall continue until the 365-day rolling total of the amount of Total HAP emissions from all emission units covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit drops below 8.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Total HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 8.0 tons, daily recordkeeping will be required per this Condition of this permit.

M. The permittee shall retain Material Safety Data Sheets (MSDS) for all VOC and HAP containing materials used in the emission units covered under the Area 46 Emission Caps.

NSPS and NESHAP Requirements

N. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL), as defined in 40 CFR Part 51.100, stored in the bulk storage tanks TK-958 - TK-989 shall be less than 15.0 kPa.
   (1) The facility shall keep readily accessible records showing the dimensions and capacity for the bulk storage tanks TK-958 - TK-989.
   (2) The facility shall document the maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL) stored in the bulk storage tanks TK-958 - TK-989.
   (3) The facility shall notify the Administrator within 30 days if the maximum true vapor pressure of the liquids stored in the bulk storage tanks TK-958 - TK-989 exceeds 15.0 kPa.

O. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

P. The owner or operator shall determine and document which storage tank covered under this permit is subject to 40 CFR Part 63 Subpart FFFF, and, if subject, to which miscellaneous organic chemical process unit (MCPU) the tank is assigned, using the procedures in § 63.2435 (d), if applicable.

Q. The material stored in the storage tanks that are part of the miscellaneous organic chemical process unit with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall determine and document the group status for the storage tanks covered under this permit that are part of any miscellaneous organic chemical process unit, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

R. The facility shall analyze all changes in material stored in any applicable storage tank and determine if there is a change in applicability for any NSPS or NESHAP subparts.
(1) The facility shall document all changes in the contents of the tanks or process or formulations changes to any tank that is part of a MCPU and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement:  DNR Construction Permits Listed in Table: Associated Equipment

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:  DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4) "cf"

**Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

<table>
<thead>
<tr>
<th>EP ID</th>
<th>Stack Height, Feet</th>
<th>Discharge Style</th>
<th>Stack Opening, inches</th>
<th>Stack Temperature, °F</th>
<th>Exhaust Flowrate, SCFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-TK-982</td>
<td>12</td>
<td>Downward</td>
<td>6</td>
<td>70</td>
<td>Displacement</td>
</tr>
</tbody>
</table>

Authority for Requirement:  DNR Construction Permits Listed in Table: Associated Equipment

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?  Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required?  Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required?  Yes ☐ No ☒

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Number: Building 40 Product Loadouts

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B40-LO-1</td>
<td>B40-LO-1</td>
<td>Building 40 Truck Loadout 1</td>
<td>400 gallons/min</td>
<td>None</td>
<td>14-A-527-S3</td>
</tr>
<tr>
<td>EP-B40-LO-3</td>
<td>B40-LO-3</td>
<td>Building 40 Truck Loadout 3</td>
<td>400 gallons/min</td>
<td>None</td>
<td>19-A-313-S1</td>
</tr>
<tr>
<td>EP-B40-LO-4</td>
<td>B40-LO-4</td>
<td>Building 40 Truck Loadout 4</td>
<td>400 gallons/min</td>
<td>None</td>
<td>19-A-314-S1</td>
</tr>
<tr>
<td>EP-B40-LO-5</td>
<td>B40-LO-5</td>
<td>Building 40 Truck Loadout 5</td>
<td>400 gallons/min</td>
<td>None</td>
<td>19-A-315-S1</td>
</tr>
<tr>
<td>EP-B40-LO-6</td>
<td>B40-LO-6</td>
<td>Building 40 Truck Loadout 6</td>
<td>400 gallons/min</td>
<td>None</td>
<td>19-A-316-S1</td>
</tr>
<tr>
<td>EP-B40-LO-7</td>
<td>B40-LO-7</td>
<td>Building 40 Truck Loadout 7</td>
<td>400 gallons/min</td>
<td>None</td>
<td>19-A-317-S1</td>
</tr>
<tr>
<td>EP-B40-LO-8</td>
<td>B40-LO-8</td>
<td>Building 40 Truck Loadout 8</td>
<td>400 gallons/min</td>
<td>None</td>
<td>19-A-318-S1</td>
</tr>
<tr>
<td>EP-B40-LO-9</td>
<td>B40-LO-9</td>
<td>Building 40 Rail Loadout</td>
<td>400 gallons/min</td>
<td>None</td>
<td>19-A-319-S1</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

- **Pollutant:** Volatile Organic Compounds (VOC)
  - Emission Limit(s): 13 tons/yr\(^{(1)}\)
  - Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

Pollutant: Single Hazardous Air Pollutant
- Emission Limit(s): 0.80 tons/yr\(^{(2)}\)
- Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

Pollutant: Total Hazardous Air Pollutants
- Emission Limit(s): 10 tons/yr\(^{(3)}\)
- Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment


The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only loadout materials from the Area 46 in emission points EP-B40-LO-1 - EP-B40-LO-9 (henceforth called B40 Product Loadouts).
(1) For all materials transferred in the B40 Product Loadouts, the owner or operator shall record and document:
   a) the loadout used;
   b) the VOC/HAP-containing material transferred;
   c) the amount of VOC-containing material transferred;
   d) if the material is produced in an MCU for NESHAP Subpart FFFF; and
   e) the vapor pressure.
(2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC/HAP-containing material transferred in the B40 Product Loadouts.

C. The owner or operator shall only use clean trucks and railcars, or trucks and railcars that are dedicated to transporting materials from building B40 in the B40 Product Loadouts.
(1) The facility shall maintain verification that the trucks and railcars that are used for the B40 Product Loadouts operation are clean or are dedicated to transporting materials from building B40.

D. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

(1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

Recordkeeping for the Area 46 VOC and HAP Emission Caps
The following monitoring and recordkeeping requirements are used to show compliance with the VOC, Single HAP, and Total HAP emission limit caps in Condition 1 of this permit. The Single HAP emissions are defined as the emissions of any individual HAP emitted by the emission episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF. The Total HAP emissions are defined as the sum of all Single HAP emitted by the episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF.


The VOC emission limit covers the following emission episodes from the emission units covered under this permit for the production of products made in the Area 46 process:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Drum Heating
Laboratory Emissions
Tank Cleaning Emissions
Tanker Cleaning Emissions

The HAP emission limits covers the following emission episodes from the emission units covered under this permit for the production of products made in Area 46:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating Process Tank Cleaning Emissions

The limit only covers emissions from units that are part of the miscellaneous organic chemical manufacturing process unit (MCPU) for Area 46 process as defined in the subpart.

The facility must keep the following records to show compliance with the emission limit caps:

E. For each product produced in the Area 46, that uses a VOC-containing or HAP-containing material, the permittee shall determine and record the VOC, Single HAP, and Total HAP emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition EG.5. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
   (5) The permittee shall calculate and record the VOC, Single HAP, and Total HAP emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.
      a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.
      b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).
c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC, Single HAP, and Total HAP emission rate (tons/batch) by summing the emission rate of each emission episode.

F. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition EG.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

G. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC, Single HAP, and Total HAP ton per year emission limit caps in the emission limit section of this permit:

(1) The identification of each VOC-containing or HAP-containing material processed, used, or generated; as required to calculate the VOC and HAP emissions for the emission limit caps.
(2) The daily number of standard or nonstandard batches completed for each product produced.

H. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limits section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

I. If the 12-month rolling total of the VOC emissions exceeds 10.4 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit., the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 10.4 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 10.4 tons, daily recordkeeping will be required per this Condition of this permit.

J. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding Single HAP emissions, in tons.
   (2) The total amount of Single HAP emissions for each product produced, in tons.
   (3) The total amount of Single HAP emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of Single HAP emissions from all products produced, in tons.

K. If the 12-month rolling total of the Single HAP emissions exceeds 0.80 tons from all emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit., the permittee shall immediately begin keeping the following daily records:
(1) The number of standard and nonstandard batches and the corresponding Single HAP emissions, for each product produced, in tons.
(2) The total amount of Single HAP emissions for each product produced, in tons.
(3) The total amount of Single HAP emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of Single HAP emissions from all products produced, in tons.

Daily calculations for Single HAP emissions shall continue until the 365-day rolling total of the amount of Single HAP emissions from all emission units covered by the Single HAP ton per year emission limit cap in Condition 1 of this permit drops below 0.80 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Single HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 0.80 tons, daily recordkeeping will be required per this Condition of this permit.

L. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit:
(1) The number of standard and nonstandard batches completed for each product produced and the corresponding Total HAP emissions, in tons.
(2) The total amount of Total HAP emissions for each product produced, in tons.
(3) The total amount of Total HAP emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of Total HAP emissions from all products produced, in tons.

M. If the 12-month rolling total of the Total HAP emissions exceeds 8.0 tons from all emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
(1) The number of standard and nonstandard batches and the corresponding Total HAP emissions, for each product produced, in tons.
(2) The total amount of Total HAP emissions for each product produced, in tons.
(3) The total amount of Total HAP emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of Total HAP emissions from all products produced, in tons.

Daily calculations for Total HAP emissions shall continue until the 365-day rolling total of the amount of Total HAP emissions from all emission units covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit drops below 8.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Total HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 8.0 tons, daily recordkeeping will be required per this Condition of this permit.

N. The permittee shall retain Material Safety Data Sheets (MSDS) for all VOC and HAP containing materials used in the emission units covered under the Area 46 Emission Caps.
NSPS and NESHAP Requirements

O. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

P. The owner or operator shall determine and document which transfer racks covered under this permit are subject to 40 CFR Part 63 Subpart FFFF, and, if subject, which miscellaneous organic chemical process unit (MCPU) the transfer rack is assigned, using the procedures in §63.2435 (d), if applicable.

Q. The facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of a miscellaneous organic chemical process unit for the transfer racks covered under this permit, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550. If the facility determines that this transfer rack is subject to the Group 1 requirements in the subpart, the facility shall modify the permit within 30 days to include the requirements of the subpart.
   (1) The owner or operator shall determine and document the group status for the transfer racks that are part of a miscellaneous organic chemical process unit for the transfer racks covered under this permit, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

R. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the B40 Product Loadouts.
   (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: B42-1

Associated Equipment

<table>
<thead>
<tr>
<th>EU ID</th>
<th>Description</th>
<th>Maximum Rated Capacity</th>
<th>Control Equipment Description and ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU 4203-U-03</td>
<td>Bulk Bag Unloader</td>
<td>12,000 lbs/hr</td>
<td>Bin Vent Baghouse (CE 4203-U-01)</td>
</tr>
<tr>
<td>TK-4203</td>
<td>Premix Tank</td>
<td>20,000 gallons, 6,600 gallons/hr</td>
<td>HEPA/Carbon filter (CE 4203-U-02)</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)d
DNR Construction Permit 14-A-528-S3

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.03 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)a
DNR Construction Permit 14-A-528-S3

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 13 tons/yr (2)
Authority for Requirement: DNR Construction Permit 14-A-528-S3

Pollutant: Single Hazardous Air Pollutant
Emission Limit(s): 0.80 tons/yr (3)
Authority for Requirement: DNR Construction Permit 14-A-528-S3

Pollutant: Total Hazardous Air Pollutants
Emission Limit(s): 10 tons/yr (4)
Authority for Requirement: DNR Construction Permit 14-A-528-S3

(2) Total VOC emissions from the emissions sources covered under the Area 46 VOC Emission Cap shall not exceed 13.0 tons per each 365-day rolling period (or 12-month rolling total, as specified in Condition 5). The


Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements
A. All process equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The permittee (or owner or operator) shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the equipment covered under this permit.

B. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

Control Equipment Requirements
C. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

D. The differential pressure drop across dry filters shall be maintained between 1.0 and 3.0 inches water column except during periods of filter replacement.
(1) The owner or operator shall collect and record the pressure drop across all of the control equipment, in inches of water, on a daily basis. If the pressure drop across the dry filters falls outside the range specified in above, the owner or operator shall investigate the filters and make the necessary corrections. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the process is not in operation.

Recordkeeping for the Area 46 VOC and HAP Emission Caps
The following monitoring and recordkeeping requirements are used to show compliance with the VOC, Single HAP, and Total HAP emission limit caps in the emission limit section of this permit. The Single HAP emissions are defined as the emissions of any individual HAP emitted by the emission episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF. The Total HAP emissions are defined as the sum of all Single HAP emitted by the episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF.


The VOC emission limit covers the following emission episodes from the emission units covered under this permit for the production of products made in the Area 46 process:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Drum Heating
Laboratory Emissions
Tank Cleaning Emissions
Tanker Cleaning Emissions

The HAP emission limits covers the following emission episodes from the emission units covered under this permit for the production of products made in Area 46:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Process Tank Cleaning Emissions
The limit only covers emissions from units that are part of the miscellaneous organic chemical manufacturing process unit (MCPU) for Area 46 process as defined in the subpart.

The facility must keep the following records to show compliance with the emission limit caps:

E. For each product produced in the Area 46, that uses a VOC-containing or HAP-containing material, the permittee shall determine and record the VOC, Single HAP, and Total HAP emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product produced.
(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition EG.5. The facility shall document and provide a justification for the value for each input used.
(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
(5) The permittee shall calculate and record the VOC, Single HAP, and Total HAP emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating
d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC, Single HAP, and Total HAP emission rate (tons/batch) by summing the emission rate of each emission episode.

F. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition EG.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

G. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC, Single HAP, and Total HAP ton per year emission limit caps in the emission limit section of this permit:

(1) The identification of each VOC-containing or HAP-containing material processed, used, or generated; as required to calculate the VOC and HAP emissions for the emission limit caps.

(2) The daily number of standard or nonstandard batches completed for each product produced.
H. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

I. If the 12-month rolling total of the VOC emissions exceeds 10.4 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 10.4 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 10.4 tons, daily recordkeeping will be required per this Condition of this permit.

J. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding Single HAP emissions, in tons.
   (2) The total amount of Single HAP emissions for each product produced, in tons.
   (3) The total amount of Single HAP emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of Single HAP emissions from all products produced, in tons.

K. If the 12-month rolling total of the Single HAP emissions exceeds 0.80 tons from all emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding Single HAP emissions, for each product produced, in tons.
   (2) The total amount of Single HAP emissions for each product produced, in tons.
   (3) The total amount of Single HAP emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of Single HAP emissions from all products produced, in tons.

Daily calculations for Single HAP emissions shall continue until the 365-day rolling total of the amount of Single HAP emissions from all emission units covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit drops below 0.80 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Single HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 0.80 tons, daily recordkeeping will be required per this Condition of this permit.

L. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding Total HAP emissions, in tons.
   (2) The total amount of Total HAP emissions for each product produced, in tons.
   (3) The total amount of Total HAP emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of Total HAP emissions from all products produced, in tons.

M. If the 12-month rolling total of the Total HAP emissions exceeds 8.0 tons from all emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding Total HAP emissions, for each product produced, in tons.
   (2) The total amount of Total HAP emissions for each product produced, in tons.
   (3) The total amount of Total HAP emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of Total HAP emissions from all products produced, in tons.

Daily calculations for Total HAP emissions shall continue until the 365-day rolling total of the amount of Total HAP emissions from all emission units covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit drops below 8.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Total HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 8.0 tons, daily recordkeeping will be required per this Condition of this permit.

N. The permittee shall retain Material Safety Data Sheets (MSDS) for all VOC and HAP containing materials used in the emission units covered under the Area 46 Emission Caps.
NSPS and NESHAP Requirements

O. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, 63.2515, 63.2520, and 63.2525.

P. All batch process vents that are part of the miscellaneous organic chemical process unit for the Area 46 process shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the Area 46 process, according to 40 CFR Part 63 Subpart FFFF, 63.2550.
   (2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the Area 46 process) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).
   (3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525s (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
      (a) A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
      (b) A record of whether each batch operated was considered a standard batch.
      (c) The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
      (d) Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

Q. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

R. The facility shall analyze any changes in formulations and determine if there is a change in applicability for any NSPS or NESHAP subparts for Area 46 process.
   (1) The facility shall document the results of any NSPS or NESHAP determinations as required in this permit.

Authority for Requirement: DNR Construction Permit 14-A-528-S3
**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 14-A-528-S3
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 55
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): 400
Exhaust Temperature (°F): 70
Discharge Style: Unobstructed Vertical

Authority for Requirement: DNR Construction Permit 14-A-528-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? [ ] Yes [ ] No

Facility Maintained Operation & Maintenance Plan Required? [ ] Yes [ ] No

Compliance Assurance Monitoring (CAM) Plan Required? [ ] Yes [ ] No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.***

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: B42-3

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): B42-3

Emission Unit ID Number: B42-3
Emission Unit Description: Building 42 Product Packaging
Raw Material/Fuel: Herbicide
Rated Capacity: 100 gal/min (Packaging); 100 gal/min (Totes)

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 13 tons/yr
Authority for Requirement: DNR Construction Permit 14-A-530-S3

Pollutant: Single Hazardous Air Pollutant
Emission Limit(s): 0.80 tons/yr
Authority for Requirement: DNR Construction Permit 14-A-530-S3

Pollutant: Total Hazardous Air Pollutants
Emission Limit(s): 10 tons/yr
Authority for Requirement: DNR Construction Permit 14-A-530-S3


The cap also includes emissions from all Area 46 uncaptured container filling and heating operations (excluding finished product packaging), tank cleaning, and uncaptured tanker storage.

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements
A. All process equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The permittee (or owner or operator) shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the equipment covered under this permit.

B. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

Recordkeeping for the Area 46 VOC and HAP Emission Caps
The following monitoring and recordkeeping requirements are used to show compliance with the VOC, Single HAP, and Total HAP emission limit caps in Condition 1 of this permit. The Single HAP emissions are defined as the emissions of any individual HAP emitted by the emission episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF. The Total HAP emissions are defined as the sum of all Single HAP emitted by the episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF.


The VOC emission limit covers the following emission episodes from the emission units covered under this permit for the production of products made in the Area 46 process:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Drum Heating
Laboratory Emissions
Tank Cleaning Emissions
Tanker Cleaning Emissions

The HAP emission limits covers the following emission episodes from the emission units covered under this permit for the production of products made in Area 46:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Process Tank Cleaning Emissions

The limit only covers emissions from units that are part of the miscellaneous organic chemical manufacturing process unit (MCPU) for Area 46 process as defined in the subpart.

The facility must keep the following records to show compliance with the emission limit caps:

C. For each product produced in the Area 46, that uses a VOC-containing or HAP-containing material, the permittee shall determine and record the VOC, Single HAP, and Total HAP emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
(1) The permittee shall identify and document each product produced.
(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition CG.5. The facility shall document and provide a justification for the value for each input used.
(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
(5) The permittee shall calculate and record the VOC, Single HAP, and Total HAP emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air
Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.
(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC, Single HAP, and Total HAP emission rate (tons/batch) by summing the emission rate of each emission episode.

D. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.
   (1) The permittee shall use the operating scenarios required in Condition CG.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

E. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC, Single HAP, and Total HAP ton per year emission limit caps in the emission limit section of this permit:
   (1) The identification of each VOC-containing or HAP-containing material processed, used, or generated; as required to calculate the VOC and HAP emissions for the emission limit caps.
   (2) The daily number of standard or nonstandard batches completed for each product produced.

F. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions for all products produced, in tons.

G. If the 12-month rolling total of the VOC emissions exceeds 10.4 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 10.4 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 10.4 tons, daily recordkeeping will be required per this Condition of this permit.
H. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding Single HAP emissions, in tons.
   (2) The total amount of Single HAP emissions for each product produced, in tons.
   (3) The total amount of Single HAP emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of Single HAP emissions from all products produced, in tons.

I. If the 12-month rolling total of the Single HAP emissions exceeds 0.80 tons from all emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding Single HAP emissions, for each product produced, in tons.
   (2) The total amount of Single HAP emissions for each product produced, in tons.
   (3) The total amount of Single HAP emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of Single HAP emissions from all products produced, in tons.

Daily calculations for Single HAP emissions shall continue until the 365-day rolling total of the amount of Single HAP emissions from all emission units covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit drops below 0.80 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Single HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 0.80 tons, daily recordkeeping will be required per this Condition of this permit.

J. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding Total HAP emissions, in tons.
   (2) The total amount of Total HAP emissions for each product produced, in tons.
   (3) The total amount of Total HAP emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of Total HAP emissions from all products produced, in tons.

K. If the 12-month rolling total of the Total HAP emissions exceeds 8.0 tons from all emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding Total HAP emissions, for each product produced, in tons.
(2) The total amount of Total HAP emissions for each product produced, in tons.
(3) The total amount of Total HAP emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of Total HAP emissions from all products produced, in tons.

Daily calculations for Total HAP emissions shall continue until the 365-day rolling total of the amount of Total HAP emissions from all emission units covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit drops below 8.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Total HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 8.0 tons, daily recordkeeping will be required per this Condition of this permit.

L. The permittee shall retain Material Safety Data Sheets (MSDS) for all VOC and HAP containing materials used in the emission units covered under the Area 46 Emission Caps.

NSPS and NESHAP Requirements
M. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, 63.2515, 63.2520, and 63.2525.

N. The facility shall analyze any changes in formulations and determine if there is a change in applicability for any NSPS or NESHAP subparts for Area 46 process.
(1) The facility shall document the results of any NSPS or NESHAP determinations as required in this permit.

Authority for Requirement: DNR Construction Permit 14-A-530-S3

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 14-A-530-S3
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 55  
Stack Opening, (inches, dia.): 6  
Exhaust Flow Rate (scfm): 400  
Exhaust Temperature (°F): 70  
Discharge Style: Unobstructed Vertical  
Authority for Requirement: DNR Construction Permit 14-A-530-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

<table>
<thead>
<tr>
<th>Agency Approved Operation &amp; Maintenance Plan Required?</th>
<th>Yes ☐ No ☒</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
</tbody>
</table>

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Building 42 Product Truck Loadouts

Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B42-LO-1</td>
<td>B42-LO-1</td>
<td>Building 42 Truck Loadout 1</td>
<td>400 gallons/min</td>
<td>None</td>
<td>14-A-531-S4</td>
</tr>
<tr>
<td>EP- B42-LO-3</td>
<td>B42-LO-3</td>
<td>Building 42 Truck Loadout 3</td>
<td>400 gallons/min</td>
<td>None</td>
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<tr>
<td>EP- B42-LO-4</td>
<td>B42-LO-4</td>
<td>Building 42 Truck Loadout 4</td>
<td>400 gallons/min</td>
<td>None</td>
<td>20-A-206</td>
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<tr>
<td>EP- B42-LO-5</td>
<td>B42-LO-5</td>
<td>Building 42 Truck Loadout 5</td>
<td>400 gallons/min</td>
<td>None</td>
<td>20-A-207</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)  
Emission Limit(s): 13 tons/yr(1)  
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

Pollutant: Volatile Organic Compounds (VOC)  
Emission Limit(s): 17 tons/yr(2)  
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

Pollutant: Single Hazardous Air Pollutant (HAP)  
Emission Limit(s): 0.80 tons/yr(3)  
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

Pollutant: Total Hazardous Air Pollutant (HAP)  
Emission Limit(s): 10 tons/yr(4)  
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

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(2) Emission limits apply to B37 Processing Plant. This limit applies to all of the emission episodes for B37 Processing Plant listed in operating requirements section of this permit.


**Operating Requirements with Associated Monitoring and Recordkeeping**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.

(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only loadout materials from the Building 37 and Area 46 processing lines in emission points EP-42-LO-1 - EP-B42-LO-3 (henceforth called B42 Product Loadouts).

(1) For all materials transferred in the B42 Product Loadouts, the owner or operator shall record and document:

   a) the loadout used;
   b) the VOC/HAP-containing material transferred;
   c) the amount of VOC-containing material transferred;
   d) the origins of the material (i.e. Building 37 and Area 46 processing lines);
   e) if the material is produced in an MCU for NESHAP Subpart FFFF; and
   f) the vapor pressure.

(2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC/HAP-containing material transferred in the B42 Product Loadouts.
C. The owner or operator shall only use clean trucks and railcars, or trucks and railcars that are dedicated to transporting materials from building 42 in the B42 Product Loadout (EU B42-4).
   (1) The facility shall maintain verification that the trucks and railcars that are used for the B42 Product Loadout (EU B42-4) operation are clean or are dedicated to transporting materials from building B42.

D. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

Recordkeeping for the Area 46 VOC and HAP Emission Caps
The following monitoring and recordkeeping requirements are used to show compliance with the VOC, Single HAP, and Total HAP emission limit caps in the emission limit section of this permit.

The Single HAP emissions are defined as the emissions of any individual HAP emitted by the emission episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF. The Total HAP emissions are defined as the sum of all Single HAP emitted by the episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF.


The VOC emission limit covers the following emission episodes from the emission units covered under this permit for the production of products made in the Area 46 process:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Drum Heating
Laboratory Emissions
Tank Cleaning Emissions
Tanker Cleaning Emissions

The HAP emission limits covers the following emission episodes from the emission units covered under this permit for the production of products made in Area 46:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Process Tank Cleaning Emissions

The limit only covers emissions from units that are part of the miscellaneous organic chemical manufacturing process unit (MCPU) for Area 46 process as defined in the subpart.

The facility must keep the following records to show compliance with the emission limit caps:

E. For each product produced in the Area 46, that uses a VOC-containing or HAP-containing material, the permittee shall determine and record the VOC, Single HAP, and Total HAP emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

1. The permittee shall identify and document each product produced.
2. The permittee shall identify and document each standard and nonstandard batch used to produce each product.
3. The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using the equations listed below in Condition E.G.5. The facility shall document and provide a justification for the value for each input used.
4. The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
5. The permittee shall calculate and record the VOC, Single HAP, and Total HAP emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of
Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC, Single HAP, and Total HAP emission rate (tons/batch) by summing the emission rate of each emission episode.

F. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition EG.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

G. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC, Single HAP, and Total HAP ton per year emission limit caps in the emission limit section of this permit:
(1) The identification of each VOC-containing or HAP-containing material processed, used, or generated; as required to calculate the VOC and HAP emissions for the emission limit caps.

(2) The daily number of standard or nonstandard batches completed for each product produced.

H. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

I. If the 12-month rolling total of the VOC emissions exceeds 10.4 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 10.4 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 10.4 tons, daily recordkeeping will be required per this Condition of this permit.

J. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding Single HAP emissions, in tons.
(2) The total amount of Single HAP emissions for each product produced, in tons.
(3) The total amount of Single HAP emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of Single HAP emissions from all products produced, in tons.

K. If the 12-month rolling total of the Single HAP emissions exceeds 0.80 tons from all emission units/episodes covered by the Single HAP ton per year emission limit cap in
the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

1. The number of standard and nonstandard batches and the corresponding Single HAP emissions, for each product produced, in tons.
2. The total amount of Single HAP emissions for each product produced, in tons.
3. The total amount of Single HAP emissions for all products produced, in tons.
4. The 365-day rolling total of the amount of Single HAP emissions from all products produced, in tons.

Daily calculations for Single HAP emissions shall continue until the 365-day rolling total of the amount of Single HAP emissions from all emission units covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit drops below 0.80 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Single HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 0.80 tons, daily recordkeeping will be required per this Condition of this permit.

L. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit:

1. The number of standard and nonstandard batches completed for each product produced and the corresponding Total HAP emissions, in tons.
2. The total amount of Total HAP emissions for each product produced, in tons.
3. The total amount of Total HAP emissions for all products produced, in tons.
4. The 12-month rolling total of the amount of Total HAP emissions from all products produced, in tons.

M. If the 12-month rolling total of the Total HAP emissions exceeds 8.0 tons from all emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

1. The number of standard and nonstandard batches and the corresponding Total HAP emissions, for each product produced, in tons.
2. The total amount of Total HAP emissions for each product produced, in tons.
3. The total amount of Total HAP emissions for all products produced, in tons.
4. The 365-day rolling total of the amount of Total HAP emissions from all products produced, in tons.

Daily calculations for Total HAP emissions shall continue until the 365-day rolling total of the amount of Total HAP emissions from all emission units covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit drops below 8.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Total HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 8.0 tons, daily recordkeeping will be required per this Condition of this permit.
N. The permittee shall retain Material Safety Data Sheets (MSDS) for all VOC and HAP containing materials used in the emission units covered under the Area 46 Emission Caps.

Recordkeeping for the Building 37 Processing Plant VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in Condition 1 of this permit for the Building 37 Processing Plant. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points 37-1, 37-2, 37-3, and 37-4; those listed in the permits for Building 37 – Interior VOC Emissions, as well as those from miscellaneous sources related to B37 production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The limit also covers VOC emissions from storing materials from B37 in the storage tanks in buildings B11, B39 and B42, and packaging and loadout in buildings B11, B14, B39 and B42. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the Building 37 Processing Plant:

Displacement, Packaging, and Bulk Loadout (Filling)  
Storage Tanks  
Gas Sweep  
Solids Handling  
Evaporation from Screens and Open Tanks  
Heating  
Ancillary Packaging Emissions - Ink Jet & Stenciling  
Laboratory Emissions  
Tank Cleaning Emissions  
Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

O. For each product produced in the Building 37 Processing Plant, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product produced.

(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.

(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition 5.O4.(5) The facility shall document and provide a justification for the value for each input used.

(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall
be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.
The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

P. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition 5.OM above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

Q. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.

R. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in Condition 1 of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

S. If the 12-month rolling total of the VOC emissions exceeds 13.5 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in
the emission limit section of this permit drops below 13.5 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 13.5 tons, daily recordkeeping will be required per this Condition of this permit.

**NSPS and NESHAP Requirements**

**T.** The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

1. The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

**U.** The owner or operator shall determine and document which transfer racks covered under this permit are subject to 40 CFR Part 63 Subpart FFFF, and, if subject, which miscellaneous organic chemical process unit (MCPU) the transfer rack is assigned, using the procedures in §63.2435 (d), if applicable.

**V.** The facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of a miscellaneous organic chemical process unit for the transfer racks covered under this permit, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550. If the facility determines that this transfer rack is subject to the Group 1 requirements in the subpart, the facility shall modify the permit within 30 days to include the requirements of the subpart.

1. The owner or operator shall determine and document the group status for the transfer racks that are part of a miscellaneous organic chemical process unit for the transfer racks covered under this permit, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

**W.** The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the loadouts in B42.

1. The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment
**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:  
DNR Construction Permits Listed in Table: Associated Equipment  
40 CFR 63 Subpart FFFF  
567 IAC 23.1(4)"cf"

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ✗

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ✗

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ✗

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: B45 Bulk Bag Unloaders and Reactors

### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk Bag Unloader (4501-U-01)</td>
<td>Whirl Wet Dust Collector (4501-U2-02)</td>
<td>10 tph</td>
</tr>
<tr>
<td>Bulk Bag Unloader (4502-U-01)</td>
<td>Whirl Wet Dust Collector (4502-U2-02)</td>
<td>10 tph</td>
</tr>
<tr>
<td>Bulk Bag Unloader (4503-U-01)</td>
<td>Whirl Wet Dust Collector (4503-U2-02)</td>
<td>10 tph</td>
</tr>
<tr>
<td>Reactor 1 (TK-4501)</td>
<td>Whirl Wet Dust Collector (4501-U2-02)</td>
<td>6,500 gallons, 1,500 gph</td>
</tr>
<tr>
<td>Reactor 2 (TK-4502)</td>
<td>Whirl Wet Dust Collector (4502-U2-02)</td>
<td>6,500 gallons, 1,500 gph</td>
</tr>
<tr>
<td>Reactor 3 (TK-4503)</td>
<td>Whirl Wet Dust Collector (4503-U2-02)</td>
<td>6,500 gallons, 1,500 gph</td>
</tr>
<tr>
<td>DMA Tank (TK-4506)</td>
<td>None (1)</td>
<td>60,000 gallons</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

**Pollutant: Opacity**
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 14-A-532-S3

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

**Pollutant: Particulate Matter (PM)**
Emission Limit(s): 0.17 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 14-A-532-S3

**Pollutant: Volatile Organic Compounds (VOC)**
Emission Limit(s): 1.50 lb/hr(2); 13 tons/yr(3)
Authority for Requirement: DNR Construction Permit 14-A-532-S3

**Pollutant: Single Hazardous Air Pollutant**
Emission Limit(s): 1.50 lb/hr(2); 0.80 tons/yr(4)
Authority for Requirement: DNR Construction Permit 14-A-532-S3

**Pollutant: Total Hazardous Air Pollutants**
Emission Limit(s): 1.50 lb/hr(2); 10 tons/yr(5)
Authority for Requirement: DNR Construction Permit 14-A-532-S3
This emission limit applies only to this emission point, EP B45-1.


**Operating Requirements with Associated Monitoring and Recordkeeping**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.

1. The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The permittee shall keep all ports and manways on the tanks in a closed position at all times when storing liquid materials other than when adding materials, measuring liquid heights, and cleaning or maintaining the tanks. Materials must be added to the tank in a manner that minimizes emissions.

1. The owner or operator shall inspect the tanks quarterly to ensure all ports and manways are closed. The facility shall document the results of the inspection.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

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(1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

**Control Equipment Requirements**

D. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

E. The differential pressure drop across the dust collectors (4501-U2-02, 4502-U2-02, & 4503-U2-02) shall be maintained between 7.0 and 9.0 inches water column except during periods of filter replacement.

(1) The owner or operator shall collect and record the pressure drop across dust collectors (4501-U2-02, 4502-U2-02, & 4503-U2-02), in inches of water, on a daily basis. If the pressure drop across the dry filters falls outside the range specified in Condition 14.C, the owner or operator shall investigate the filters and make the necessary corrections. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the process is not in operation.

F. The differential pressure drop across the scrubber (T-4508) shall be maintained between 0.95 and 3.09 inches water column.

(1) Daily, the owner or operator shall monitor and document the pressure drop across the scrubber (T-4508). If the pressure drop falls outside the range specified in Condition 14.D the owner or operator shall investigate the scrubber and make the necessary corrections. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the process is not in operation.

G. The pH of the scrubber (T-4508) absorbing liquid shall be maintained between 4.0 and 6.0.

(1) The facility shall monitor and document the pH of the absorbing liquid for the scrubber (T-4508) daily. If the pH falls outside the range specified in Condition 14.E the owner or operator shall investigate the scrubber and make the necessary corrections. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the process is not in operation.

H. The DMA emissions created during the filling of the DMA tank shall be vented back to tanker/railcar during deliveries.

**Recordkeeping for the Area 46 VOC and HAP Emission Caps**

The following monitoring and recordkeeping requirements are used to show compliance with the VOC, Single HAP, and Total HAP emission limit caps in Condition 1 of this permit. The Single HAP emissions are defined as the emissions of any individual HAP emitted by the emission episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF. The Total HAP emissions are defined as the sum of all Single HAP emitted by the episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF.

The VOC emission limit covers the following emission episodes from the emission units covered under this permit for the production of products made in the Area 46 process:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Storage Tanks
- Gas Sweep
- Solids Handling
- Evaporation from Screens and Open Tanks
- Heating
- Drum Heating
- Laboratory Emissions
- Tank Cleaning Emissions
- Tanker Cleaning Emissions

The HAP emission limits covers the following emission episodes from the emission units covered under this permit for the production of products made in Area 46:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Storage Tanks
- Gas Sweep
- Solids Handling
- Evaporation from Screens and Tank Evaporation
- Heating
- Process Tank Cleaning Emissions

The limit only covers emissions from units that are part of the miscellaneous organic chemical manufacturing process unit (MCPU) for Area 46 process as defined in the subpart.

The facility must keep the following records to show compliance with the emission limit caps:

I. For each product produced in the Area 46, that uses a VOC-containing or HAP-containing material, the permittee shall determine and record the VOC, Single HAP, and Total HAP emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures,
vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition 1G.5. The facility shall document and provide a justification for the value for each input used.

(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC, Single HAP, and Total HAP emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.
f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC, Single HAP, and Total HAP emission rate (tons/batch) by summing the emission rate of each emission episode.

J. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition IG.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

K. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC, Single HAP, and Total HAP ton per year emission limit caps in the emission limit section of this permit:

(1) The identification of each VOC-containing or HAP-containing material processed, used, or generated; as required to calculate the VOC and HAP emissions for the emission limit caps.

(2) The daily number of standard or nonstandard batches completed for each product produced.

L. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

M. If the 12-month rolling total of the VOC emissions exceeds 10.4 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 10.4 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 10.4 tons, daily recordkeeping will be required per this Condition of this permit.

N. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit:
(1) The number of standard and nonstandard batches completed for each product produced and the corresponding Single HAP emissions, in tons.
(2) The total amount of Single HAP emissions for each product produced, in tons.
(3) The total amount of Single HAP emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of Single HAP emissions from all products produced, in tons.

O. If the 12-month rolling total of the Single HAP emissions exceeds 0.80 tons from all emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
(1) The number of standard and nonstandard batches and the corresponding Single HAP emissions, for each product produced, in tons.
(2) The total amount of Single HAP emissions for each product produced, in tons.
(3) The total amount of Single HAP emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of Single HAP emissions from all products produced, in tons.

Daily calculations for Single HAP emissions shall continue until the 365-day rolling total of the amount of Single HAP emissions from all emission units covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit drops below 0.80 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Single HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 0.80 tons, daily recordkeeping will be required per this Condition of this permit.

P. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit:
(1) The number of standard and nonstandard batches completed for each product produced and the corresponding Total HAP emissions, in tons.
(2) The total amount of Total HAP emissions for each product produced, in tons.
(3) The total amount of Total HAP emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of Total HAP emissions from all products produced, in tons.

Q. If the 12-month rolling total of the Total HAP emissions exceeds 8.0 tons from all emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
(1) The number of standard and nonstandard batches and the corresponding Total HAP emissions, for each product produced, in tons.
(2) The total amount of Total HAP emissions for each product produced, in tons.
(3) The total amount of Total HAP emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of Total HAP emissions from all products produced, in tons.

Daily calculations for Total HAP emissions shall continue until the 365-day rolling total of the amount of Total HAP emissions from all emission units covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit drops below 8.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Total HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 8.0 tons, daily recordkeeping will be required per this Condition of this permit.

R. The permittee shall retain Material Safety Data Sheets (MSDS) for all VOC and HAP containing materials used in the emission units covered under the Area 46 Emission Caps.

NSPS and NESHAP Requirements

S. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

T. All batch process vents that are part of the miscellaneous organic chemical process unit for the Area 46 Process Area shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
(1) The owner or operator shall identify all process vents that are part of the miscellaneous organic chemical process unit for the Area 46 Processing Area and document the type (continuous or batch) and group status for each vent, according to 40 CFR Part 63 Subpart FFFF, 63.2550.
(2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the Building 21 Process Area) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

(3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525 (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
   a. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
   b. A record of whether each batch operated was considered a standard batch.
   c. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
   d. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

U. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

V. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the Area 46 Process Area.
   (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 14-A-532-S3

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 14-A-532-S3
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 55
Stack Opening, (inches, dia.): 14
Exhaust Flow Rate (scfm): 1,100
Exhaust Temperature (°F): 78
Discharge Style: Unobstructed Vertical
Authority for Requirement: DNR Construction Permit 14-A-532-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: B45-2

Associated Equipment

<table>
<thead>
<tr>
<th>EU ID</th>
<th>Description</th>
<th>Maximum Rated Capacity</th>
<th>Control Equipment Description and ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>TK-4504 - 4505</td>
<td>2 Bulk Storage Tanks</td>
<td>30,000 gallons, 100 gpm</td>
<td>None</td>
</tr>
<tr>
<td>TK-4508</td>
<td>Scrubber Effluent Tank</td>
<td>3,100 gallons, 500 gpm</td>
<td>None</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 13 tons/yr
Authority for Requirement: DNR Construction Permit 14-A-533-S4

Pollutant: Single Hazardous Air Pollutant (HAP)
Emission Limit(s): 0.80 tons/yr
Authority for Requirement: DNR Construction Permit 14-A-533-S4

Pollutant: Total Hazardous Air Pollutant (HAP)
Emission Limit(s): 10 tons/yr
Authority for Requirement: DNR Construction Permit 14-A-533-S4


Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements

A. All process equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The permittee (or owner or operator) shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the equipment covered under this permit.

B. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

C. Quarterly, the owner or operator shall collect a representative sample of scrubber effluent. The owner or operator shall analyze and determine the constituent concentration and record the results. The facility shall document the methods used to make this determination. The results shall be used to verify the emissions estimates made for the Scrubber Effluent Tank TK-4508. After two years sampling, the facility may request the Department to reevaluate the sampling frequency requirements.

Recordkeeping for the Area 46 VOC and HAP Emission Caps

The following monitoring and recordkeeping requirements are used to show compliance with the VOC, Single HAP, and Total HAP emission limit caps in Condition 1 of this permit. The Single HAP emissions are defined as the emissions of any individual HAP emitted by the emission episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF. The Total HAP emissions are defined as the sum of all Single HAP emitted by the episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF.

The VOC emission limit covers the following emission episodes from the emission units covered under this permit for the production of products made in the Area 46 process:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Drum Heating
Laboratory Emissions
Tank Cleaning Emissions
Tanker Cleaning Emissions

The HAP emission limits covers the following emission episodes from the emission units covered under this permit for the production of products made in Area 46:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Process Tank Cleaning Emissions

The limit only covers emissions from units that are part of the miscellaneous organic chemical manufacturing process unit (MCPU) for Area 46 process as defined in the subpart.

The facility must keep the following records to show compliance with the emission limit caps:

D. For each product produced in the Area 46, that uses a VOC-containing or HAP-containing material, the permittee shall determine and record the VOC, Single HAP, and Total HAP emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition DG.5. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
(5) The permittee shall calculate and record the VOC, Single HAP, and Total HAP emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.
The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC, Single HAP, and Total HAP emission rate (tons/batch) by summing the emission rate of each emission episode.

E. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.
(1) The permittee shall use the operating scenarios required in Condition DG.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

F. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC, Single HAP, and Total HAP ton per year emission limit caps in the emission limit section of this permit:
(1) The identification of each VOC-containing or HAP-containing material processed, used, or generated; as required to calculate the VOC and HAP emissions for the emission limit caps.
(2) The daily number of standard or nonstandard batches completed for each product produced.

G. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

H. If the 12-month rolling total of the VOC emissions exceeds 10.4 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit., the permittee shall immediately begin keeping the following daily records:
(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.
Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 10.4 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 10.4 tons, daily recordkeeping will be required per this Condition of this permit.

I. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding Single HAP emissions, in tons.
   (2) The total amount of Single HAP emissions for each product produced, in tons.
   (3) The total amount of Single HAP emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of Single HAP emissions from all products produced, in tons.

J. If the 12-month rolling total of the Single HAP emissions exceeds 0.80 tons from all emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding Single HAP emissions, for each product produced, in tons.
   (2) The total amount of Single HAP emissions for each product produced, in tons.
   (3) The total amount of Single HAP emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of Single HAP emissions from all products produced, in tons.

Daily calculations for Single HAP emissions shall continue until the 365-day rolling total of the amount of Single HAP emissions from all emission units covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit drops below 0.80 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Single HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 0.80 tons, daily recordkeeping will be required per this Condition of this permit.

K. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding Total HAP emissions, in tons.
   (2) The total amount of Total HAP emissions for each product produced, in tons.
   (3) The total amount of Total HAP emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of Total HAP emissions from all products produced, in tons.
L. If the 12-month rolling total of the Total HAP emissions exceeds 8.0 tons from all emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding Total HAP emissions, for each product produced, in tons.
   (2) The total amount of Total HAP emissions for each product produced, in tons.
   (3) The total amount of Total HAP emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of Total HAP emissions from all products produced, in tons.

Daily calculations for Total HAP emissions shall continue until the 365-day rolling total of the amount of Total HAP emissions from all emission units covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit drops below 8.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Total HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 8.0 tons, daily recordkeeping will be required per this Condition of this permit.

M. The permittee shall retain Material Safety Data Sheets (MSDS) for all VOC and HAP containing materials used in the emission units covered under the Area 46 Emission Caps.

NSPS and NESHAP Requirements
N. The facility shall keep readily accessible records showing the dimensions and capacity for the storage tanks TK-4504 - TK-4505.

O. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL), as defined in 40 CFR Part 51.100, stored in the bulk storage tanks TK-4504 - TK-4505 shall be less than 15.0 kPa.

   (1) The facility shall document the maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL) stored in the storage tanks TK-4504 - TK-4505.

   (2) The facility shall notify the Administrator within 30 days if the maximum true vapor pressure of the liquids stored in the storage tanks TK-4504 - TK-4505 exceeds 15.0 kPa.

P. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, 63.2515, 63.2520, and 63.2525.
Q. The material stored in the storage tanks TK-4504 - TK-4505 shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550. If the facility determines that these storage tanks are subject to the Group 1 requirements in the subpart, the facility shall modify the permit within 30 days to include the requirements of the subpart.

(1) The owner or operator shall determine and document the group status for the storage tanks TK-4504 - TK-4505, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

R. The facility shall analyze any changes in formulations and determine if there is a change in applicability for any NSPS or NESHAP subparts for Area 46.

(1) The facility shall document the results of any NSPS or NESHAP determinations as required in this permit.

Authority for Requirement: DNR Construction Permit 14-A-533-S4

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 14-A-533-S4
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 12
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): Working/Breathing Loss
Exhaust Temperature (°F): Ambient
Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 14-A-533-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☑
- **Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☑
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☐ No ☑

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: B46-1

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): TK-4601 - TK-4606

Emission Unit vented through this Emission Point: TK-4601 - TK-4606
Emission Unit Description: Building 46 Tank Farm: 6 Storage Tanks
Raw Material/Fuel: Herbicide
Rated Capacity: 500,000 Gallons; 200 gpm

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 13 tons/yr(1)
Authority for Requirement: DNR Construction Permit 14-A-534-S4

Pollutant: Single Hazardous Air Pollutant (HAP)
Emission Limit(s): 0.80 tons/yr(2)
Authority for Requirement: DNR Construction Permit 14-A-534-S4

Pollutant: Total Hazardous Air Pollutant (HAP)
Emission Limit(s): 10 tons/yr(3)
Authority for Requirement: DNR Construction Permit 14-A-534-S4


Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements
A. All process equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The permittee (or owner or operator) shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the equipment covered under this permit.

B. The permittee shall keep all ports and manways on the tanks in a closed position at all times when storing liquid materials other than when adding materials, measuring liquid heights, and cleaning or maintaining the tanks. Materials must be added to the tank in a manner that minimizes emissions.
   (1) The owner or operator shall inspect the tanks quarterly to ensure all ports and manways are closed. The facility shall document the results of the inspection.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

Recordkeeping for the Area 46 VOC and HAP Emission Caps
The following monitoring and recordkeeping requirements are used to show compliance with the VOC, Single HAP, and Total HAP emission limit caps in the emission limit section of this permit. The Single HAP emissions are defined as the emissions of any individual HAP emitted by the emission episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF. The Total HAP emissions are defined as the sum of all Single HAP emitted by the episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF.

The VOC emission limit covers the following emission episodes from the emission units covered under this permit for the production of products made in the Area 46 process:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Drum Heating
Laboratory Emissions
Tank Cleaning Emissions
Tanker Cleaning Emissions

The HAP emission limits cover the following emission episodes from the emission units covered under this permit for the production of products made in Area 46:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Process Tank Cleaning Emissions

The limit only covers emissions from units that are part of the miscellaneous organic chemical manufacturing process unit (MCPU) for Area 46 process as defined in the subpart.

The facility must keep the following records to show compliance with the emission limit caps:

D. For each product produced in the Area 46, that uses a VOC-containing or HAP-containing material, the permittee shall determine and record the VOC, Single HAP, and Total HAP emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using the equations listed below in Condition DG.5. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
(5) The permittee shall calculate and record the VOC, Single HAP, and Total HAP emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in §63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.
The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC, Single HAP, and Total HAP emission rate (tons/batch) by summing the emission rate of each emission episode.

E. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition DG.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

F. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC, Single HAP, and Total HAP ton per year emission limit caps in the emission limit section of this permit:

(1) The identification of each VOC-containing or HAP-containing material processed, used, or generated; as required to calculate the VOC and HAP emissions for the emission limit caps.

(2) The daily number of standard or nonstandard batches completed for each product produced.

G. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

H. If the 12-month rolling total of the VOC emissions exceeds 10.4 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.
Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 10.4 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 10.4 tons, daily recordkeeping will be required per this Condition of this permit.

I. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding Single HAP emissions, in tons.
   (2) The total amount of Single HAP emissions for each product produced, in tons.
   (3) The total amount of Single HAP emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of Single HAP emissions from all products produced, in tons.

J. If the 12-month rolling total of the Single HAP emissions exceeds 0.80 tons from all emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding Single HAP emissions, for each product produced, in tons.
   (2) The total amount of Single HAP emissions for each product produced, in tons.
   (3) The total amount of Single HAP emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of Single HAP emissions from all products produced, in tons.

Daily calculations for Single HAP emissions shall continue until the 365-day rolling total of the amount of Single HAP emissions from all emission units covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit drops below 0.80 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Single HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 0.80 tons, daily recordkeeping will be required per this Condition of this permit.

K. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding Total HAP emissions, in tons.
   (2) The total amount of Total HAP emissions for each product produced, in tons.
   (3) The total amount of Total HAP emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of Total HAP emissions from all products produced, in tons.
L. If the 12-month rolling total of the Total HAP emissions exceeds 8.0 tons from all emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding Total HAP emissions, for each product produced, in tons.
   (2) The total amount of Total HAP emissions for each product produced, in tons.
   (3) The total amount of Total HAP emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of Total HAP emissions from all products produced, in tons.

Daily calculations for Total HAP emissions shall continue until the 365-day rolling total of the amount of Total HAP emissions from all emission units covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit drops below 8.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Total HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 8.0 tons, daily recordkeeping will be required per this Condition of this permit.

M. The permittee shall retain Material Safety Data Sheets (MSDS) for all VOC and HAP containing materials used in the emission units covered under the Area 46 Emission Caps.

**NSPS and NESHAP Requirements**

N. The facility shall keep readily accessible records showing the dimensions and capacity for the storage tanks TK-4601 - TK-4606.

O. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL), as defined in 40 CFR Part 51.100, stored in the bulk storage tanks TK-4601 - TK-4606 shall be less than 15.0 kPa.

   (1) The facility shall document the maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL) stored in the storage tanks TK-4601 - TK-4606.

   (2) The facility shall notify the Administrator within 30 days if the maximum true vapor pressure of the liquids stored in the storage tanks TK-4601 - TK-4606 exceeds 15.0 kPa.

P. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, 63.2515, 63.2520, and 63.2525.
Q. The material stored in the storage tanks TK-4601 - TK-4606 shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550. If the facility determines that these storage tanks are subject to the Group 1 requirements in the subpart, the facility shall modify the permit within 30 days to include the requirements of the subpart.

(1) The owner or operator shall determine and document the group status for the storage tanks TK-4601 - TK-4606, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

R. The facility shall analyze any changes in formulations and determine if there is a change in applicability for any NSPS or NESHAP subparts for Area 46.

(1) The facility shall document the results of any NSPS or NESHAP determinations as required in this permit.

Authority for Requirement: DNR Construction Permit 14-A-534-S4

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 14-A-534-S4

40 CFR 63 Subpart FFFF

567 IAC 23.1(4) "cf"

**Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 12
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): Working/Breathing Losses
Exhaust Temperature (°F): Ambient
Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 14-A-534-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Building 46 Product Loadout

Associated Equipment

<table>
<thead>
<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
<th>Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B46-LO-1</td>
<td>B46-LO-1</td>
<td>Building 46 Truck Loadout 1</td>
<td>400 gallons/min</td>
<td>None</td>
<td>14-A-535-S3</td>
</tr>
<tr>
<td>EP-B46-LO-3</td>
<td>B46-LO-3</td>
<td>Building 46 Truck Loadout 3</td>
<td>400 gallons/min</td>
<td>None</td>
<td>19-A-337-S1</td>
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<tr>
<td>EP-B46-LO-4</td>
<td>B46-LO-4</td>
<td>Building 46 Truck Loadout 4</td>
<td>400 gallons/min</td>
<td>None</td>
<td>19-A-338-S1</td>
</tr>
<tr>
<td>EP-B46-LO-5</td>
<td>B46-LO-5</td>
<td>Building 46 Rail Loadout 1</td>
<td>400 gallons/min</td>
<td>None</td>
<td>19-A-339-S1</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**  
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)  
Emission Limit(s): 14 tons/yr\(^{(1)}\)  
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

Pollutant: Single Hazardous Air Pollutant (HAP)  
Emission Limit(s): 0.80 tons/yr\(^{(2)}\)  
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

Pollutant: Total Hazardous Air Pollutant (HAP)  
Emission Limit(s): 10 tons/yr\(^{(3)}\)  
Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment


The cap also includes emissions from all Area 46 uncaptured container filling and heating operations (excluding finished product packaging), tank cleaning, and uncaptured tanker storage.


**Operating Requirements with Associated Monitoring and Recordkeeping**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only loadout materials from the Area 46 in emission points EP-B46-LO-1 - EP-B46-LO-5 (henceforth called B46 Product Loadouts).
   (1) For all materials transferred in the B46 Product Loadouts, the owner or operator shall record and document:
      a) the loadout used;
      b) the VOC/HAP-containing material transferred;
      c) the amount of VOC-containing material transferred;
      d) if the material is produced in an MCU for NESHAP Subpart FFFF; and
      e) the vapor pressure.
   (2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC/HAP-containing material transferred in the B46 Product Loadouts.

C. The owner or operator shall only use clean trucks and railcars, or trucks and railcars that are dedicated to transporting materials from building B46 in the B46 Product Loadout (EU B46-2).
   (1) The facility shall maintain verification that the trucks and railcars that are used for the B46 Product Loadout (EU B46-2) operation are clean or are dedicated to transporting materials from building B46.
D. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be
initiated promptly upon discovery.

(1) The owner or operator shall document all good housekeeping practices used at the
facility to minimize emissions from liquid spills.

Recordkeeping for the Area 46 VOC and HAP Emission Caps

The following monitoring and recordkeeping requirements are used to show compliance with the
VOC, Single HAP, and Total HAP emission limit caps in the emission limit section of this permit.
The Single HAP emissions are defined as the emissions of any individual HAP emitted by the
emission episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFF. The Total HAP
emissions are defined as the sum of all Single HAP emitted by the episode/unit/process that is
regulated by 40 CFR Part 63 Subpart FFF.

The caps includes emissions from the following emission points: Building 40 Storage Tanks (EP-
LO-1 - EP- B46-LO-5). The cap also includes emissions from all Area 46 uncaptured container
filling and heating operations, tank cleaning, uncaptured tanker storage, and tanker cleaning.

The VOC emission limit covers the following emission episodes from the emission units covered
under this permit for the production of products made in the Area 46 process:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Drum Heating
Laboratory Emissions
Tank Cleaning Emissions
Tanker Cleaning Emissions

The HAP emission limits covers the following emission episodes from the emission units covered
under this permit for the production of products made in Area 46:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Process Tank Cleaning Emissions
The limit only covers emissions from units that are part of the miscellaneous organic chemical manufacturing process unit (MCPU) for Area 46 process as defined in the subpart.

The facility must keep the following records to show compliance with the emission limit caps:

E. For each product produced in the Area 46, that uses a VOC-containing or HAP-containing material, the permittee shall determine and record the VOC, Single HAP, and Total HAP emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product produced.
(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition EG.5. The facility shall document and provide a justification for the value for each input used.
(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
(5) The permittee shall calculate and record the VOC, Single HAP, and Total HAP emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

   a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

   b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

   c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating
Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC, Single HAP, and Total HAP emission rate (tons/batch) by summing the emission rate of each emission episode.

F. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition EG.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

G. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC, Single HAP, and Total HAP ton per year emission limit caps in the emission limit section of this permit:

(1) The identification of each VOC-containing or HAP-containing material processed, used, or generated; as required to calculate the VOC and HAP emissions for the emission limit caps.

(2) The daily number of standard or nonstandard batches completed for each product produced.
H. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

1. The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
2. The total amount of VOC emissions for each product produced, in tons.
3. The total amount of VOC emissions for all products produced, in tons.
4. The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

I. If the 12-month rolling total of the VOC emissions exceeds 10.4 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

1. The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
2. The total amount of VOC emissions for each product produced, in tons.
3. The total amount of VOC emissions for all products produced, in tons.
4. The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 10.4 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 10.4 tons, daily recordkeeping will be required per this Condition of this permit.

J. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit:

1. The number of standard and nonstandard batches completed for each product produced and the corresponding Single HAP emissions, in tons.
2. The total amount of Single HAP emissions for each product produced, in tons.
3. The total amount of Single HAP emissions for all products produced, in tons.
4. The 12-month rolling total of the amount of Single HAP emissions from all products produced, in tons.

K. If the 12-month rolling total of the Single HAP emissions exceeds 0.80 tons from all emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

1. The number of standard and nonstandard batches and the corresponding Single HAP emissions, for each product produced, in tons.
2. The total amount of Single HAP emissions for each product produced, in tons.
3. The total amount of Single HAP emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of Single HAP emissions from all products produced, in tons.

Daily calculations for Single HAP emissions shall continue until the 365-day rolling total of the amount of Single HAP emissions from all emission units covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit drops below 0.80 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Single HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 0.80 tons, daily recordkeeping will be required per this Condition of this permit.

L. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit:
   1. The number of standard and nonstandard batches completed for each product produced and the corresponding Total HAP emissions, in tons.
   2. The total amount of Total HAP emissions for each product produced, in tons.
   3. The total amount of Total HAP emissions for all products produced, in tons.
   4. The 12-month rolling total of the amount of Total HAP emissions from all products produced, in tons.

M. If the 12-month rolling total of the Total HAP emissions exceeds 8.0 tons from all emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   1. The number of standard and nonstandard batches and the corresponding Total HAP emissions, for each product produced, in tons.
   2. The total amount of Total HAP emissions for each product produced, in tons.
   3. The total amount of Total HAP emissions for all products produced, in tons.
   4. The 365-day rolling total of the amount of Total HAP emissions from all products produced, in tons.

Daily calculations for Total HAP emissions shall continue until the 365-day rolling total of the amount of Total HAP emissions from all emission units covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit drops below 8.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Total HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 8.0 tons, daily recordkeeping will be required per this Condition of this permit.

N. The permittee shall retain Material Safety Data Sheets (MSDS) for all VOC and HAP containing materials used in the emission units covered under the Area 46 Emission Caps.
NSPS and NESHAP Requirements

O. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

P. The owner or operator shall determine and document which transfer racks covered under this permit are subject to 40 CFR Part 63 Subpart FFFF, and, if subject, which miscellaneous organic chemical process unit (MCPU) the transfer rack is assigned, using the procedures in §63.2435 (d), if applicable.

Q. The facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of a miscellaneous organic chemical process unit for the transfer racks covered under this permit, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550. If the facility determines that this transfer rack is subject to the Group 1 requirements in the subpart, the facility shall modify the permit within 30 days to include the requirements of the subpart.
   (1) The owner or operator shall determine and document the group status for the transfer racks that are part of a miscellaneous organic chemical process unit for the transfer racks covered under this permit, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

R. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the B46 Product Loadouts.
   (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

NSPS and NESHAP Applicability

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

**Agency Approved Operation & Maintenance Plan Required?**  Yes [ ] No [x]  

**Facility Maintained Operation & Maintenance Plan Required?**  Yes [ ] No [x]  

**Compliance Assurance Monitoring (CAM) Plan Required?**  Yes [ ] No [x]  

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Number: DCL

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBS Aqueous Tank (EU DCL-1000)</td>
<td>Cartridge Filter (CE DCL 1200) and HEPA Filter (CE DCL-1220)</td>
<td>1,000 lbs/hr</td>
</tr>
<tr>
<td>BBS Oil Tank (EU DCL-1010)</td>
<td>Cartridge Filter (CE DCL 1200) and HEPA Filter (CE DCL-1220)</td>
<td>1,000 lbs/hr</td>
</tr>
<tr>
<td>BBS Shar Tank (EU DCL-1020)</td>
<td>Cartridge Filter (CE DCL 1200) and HEPA Filter (CE DCL-1220)</td>
<td>1,000 lbs/hr</td>
</tr>
<tr>
<td>BBS Formulator Tank (EU DCL-1030)</td>
<td>Cartridge Filter (CE DCL 1200) and HEPA Filter (CE DCL-1220)</td>
<td>1,000 lbs/hr</td>
</tr>
<tr>
<td>Bulk Bag Unloader (EU DCL-1050)</td>
<td>Cartridge Filter (CE DCL 1200) and HEPA Filter (CE DCL-1220)</td>
<td>2,500 lbs/hr</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb/hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"

DNR Construction Permit 17-A-008-S2

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM$_{2.5}$
Emission Limit(s): 0.28 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-008-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.28 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"

DNR Construction Permit 17-A-008-S2

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 28 tons/yr
Authority for Requirement: DNR Construction Permit 17-A-008-S2
Pollutant: Single Hazardous Air Pollutant
Emission Limit(s): 9 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-008-S2

Pollutant: Total Hazardous Air Pollutants
Emission Limit(s): 23 tons/yr
Authority for Requirement: DNR Construction Permit 17-A-008-S2

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For each product produced in the Development Center for Liquids Plant, the owner or operator shall identify and document each VOC and HAP containing material processed, used, or generated.

C. The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials processed, used, or generated, used in the Development Center for Liquids Plant.

D. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

**Control Equipment Requirements**

E. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

F. The differential pressure drop across the Cartridge Filter (CE DCL-1200) shall be maintained between 0.5 and 7.0 inches water column except during periods of filter replacement.
   (1) The owner or operator shall collect and record the pressure drop across the Cartridge Filter (CE DCL-1200), in inches of water, on a continuous basis. This requirement shall not apply on the days that the filter is not in operation. If the pressure drop across any of the Cartridge Filter falls outside the range specified above, the owner or operator shall investigate the Cartridge Filter and make the necessary corrections. The permittee shall maintain a record any corrective action
taken for which data show a deviation from the specified pressure drop range above, including the date and time of the deviations, the date and time corrective action was initiated and completed, and the corrective action taken.

VOC and HAP Recordkeeping for Emission Caps
The following monitoring and recordkeeping requirements are used to show compliance with the VOC, Single HAP, and Total HAP emission limit caps in the emission limit section of this permit. The Single HAP emissions are defined as the emissions of any individual HAP emitted by the emission episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF. The Total HAP emissions are defined as the sum of all Single HAP emitted by the episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF.

The emission limits caps cover the following emission episodes from the emission units covered by the permits for emission points EP-DCL, EP-DCL-CV, and EP-DCL-1210 for the production of products made in the Development Center for Liquids Plant:

Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating

The VOC and HAP emission limits also covers emissions from any Drum Heating performed for products made in the Development Center for Liquids Plant.

G. For each product produced in the emission units covered by the permits for emission points EP-DCL, EP-DCL-CV, and EP-DCL-1210, that uses a VOC-containing or HAP-containing material, the permittee shall determine and record the VOC, Single HAP, and Total HAP emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

1. The permittee shall identify and document each product and standard and nonstandard batch.

2. The permittee shall identify and record each emission episode (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each batch.

3. The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition G.43. The facility shall document and provide a justification for the value of each input used.

4. The permittee shall calculate and record the VOC, Single HAP, and Total HAP emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa
DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in §63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in §63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide a justification for the emission factors or emission estimation methods for each emission episode.

(1) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF and provide justification for each emission episodes that is not regulated by the subpart.
(2) The facility shall calculate and document the VOC, Single HAP, and Total HAP emission rate per batch for each batch for each product by summing the emission rate per batch of each emission episode.

H. The permittee shall record each batch completed as a standard or nonstandard batch.
   a. The permittee shall use the operating scenarios required in GA.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

I. The permittee shall maintain the following daily records for the emission units/episodes covered by the VOC, Single HAP, and Total HAP ton per year emission limit caps in Condition 1 of this permit:
   (1) The identification of each VOC-containing or HAP-containing material processed, used, or generated; as required to calculate the VOC and HAP emissions for the emission limit caps.
   (2) The daily number of standard or nonstandard batches for each product.

J. The permittee shall maintain the following monthly records for the for the emission units/episodes covered by the VOC, Single HAP, and Total HAP ton per year emission limit caps in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product, in tons.
   (2) The total amount of VOC emissions for each product, in tons.
   (3) The total amount of VOC emissions for all products, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products, in tons.
   (5) The number of standard and nonstandard batches and the corresponding Single HAP emissions, for each product, in tons.
   (6) The total amount of Single HAP emissions for each product, in tons.
   (7) The total amount of Single HAP emissions for all products, in tons.
   (8) The 12-month rolling total of the amount of Single HAP emissions from all products, in tons.
   (9) The number of standard and nonstandard batches and the corresponding Total HAP emissions, for each product, in tons.
   (10) The total amount of Total HAP emissions for each product, in tons.
   (11) The total amount of Total HAP emissions for all products, in tons.
   (12) The 12-month rolling total of the amount of Total HAP emissions from all products, in tons.

The Single HAP emissions is the emissions of any individual HAP emitted by the emission episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF. The Total HAP emissions is the sum of all Single HAP emitted by the episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF.

K. If the 12-month rolling total of the VOC emissions exceeds 20.0 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product, in tons.
(2) The total amount of VOC emissions for each product, in tons.
(3) The total amount of VOC emissions for all products, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 20.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 20.0 tons, daily recordkeeping will be required per this Condition of this permit.

L. If the 12-month rolling total of any Single HAP emitted from all emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit which are regulated by 40 CFR Part 63 Subpart FFFF exceeds 7.0 tons, the permittee shall immediately begin keeping the following daily records:
(1) The number of standard and nonstandard batches and the corresponding Single HAP emissions, for each product, in tons.
(2) The total amount of Single HAP emissions for each product, in tons.
(3) The total amount of Single HAP emissions for all products, in tons.
(4) The 365-day rolling total of the amount of Single HAP emissions from all products, in tons.

Daily calculations of each single HAP emissions shall continue until the 365-day rolling total of the amount of all each single HAP emissions from all emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit which are regulated by 40 CFR Part 63 Subpart FFFF drops below 7.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of each single HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 7.0 tons, daily recordkeeping will be required per this Condition of this permit.

M. If the 12-month rolling total of total HAP emissions from all emission units/episodes covered by the Total HAP ton per year emission limit caps in the emission limit section of this permit which are regulated by 40 CFR Part 63 Subpart FFFF exceeds 18.0 tons, the permittee shall immediately begin keeping the following daily records:
(1) The number of standard and nonstandard batches and the corresponding Total HAP emissions, for each product, in tons.
(2) The total amount of Total HAP emissions for each product, in tons.
(3) The total amount of Total HAP emissions for all products, in tons.
(4) The 365-day rolling total of the amount of Total HAP emissions from all products, in tons.

Daily calculations of total HAP emissions shall continue until the 365-day rolling total of the amount of total HAP emissions from all emission units/episodes covered by the Total HAP ton per year emission limit caps in the emission limit section of this permit which are regulated by 40 CFR
Part 63 Subpart FFFF drops below 18.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of total HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 18.0 tons, daily recordkeeping will be required per this Condition of this permit.

NSPS and NESHAP Requirements

N. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

O. All batch process vents associated with the Development Center for Liquids Plant shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the Development Center for Liquids Plant, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (Development Center for Liquids Plant) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

(3) As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

(4) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525s (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:

i. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.

ii. A record of whether each batch operated was considered a standard batch.

iii. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

iv. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.
P. Any continuous process vents associated with the Development Center for Liquids Plant shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

1. The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the Development Center for Liquids Plant, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

2. As specified in § 63.2455 (b), for each continuous process vent in the Development Center for Liquids Plant, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).

3. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide a report as specified in paragraph § 63.2520 (e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

Q. Any wastewater streams associated with Development Center for Liquids Plant shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.

a. The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

R. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

S. The facility shall analyze any changes in formulations and determine if there is a change in applicability for any NSPS or NESHAP subparts for Development Center for Liquids Plant.

1. The facility shall document the results of any NSPS or NESHAP determinations as required above.

Authority for Requirement: DNR Construction Permit 17-A-008-S2
**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:  
DNR Construction Permit 17-A-008-S2  
40 CFR 63 Subpart FFFF  
567 IAC 23.1(4)"cf"

**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground):  36  
Stack Opening, (inches, dia.):  14  
Exhaust Flow Rate (scfm):  3,250  
Exhaust Temperature (°F):  120  
Discharge Style: Vertical Unobstructed  
Authority for Requirement:  DNR Construction Permit 17-A-008-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
**Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

**Agency Approved Operation & Maintenance Plan Required?**

Yes ☐ No ☒

**Facility Maintained Operation & Maintenance Plan Required?**

Yes ☒ No ☐

**Compliance Assurance Monitoring (CAM) Plan Required?**

Yes ☐ No ☒

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number:** DCL-1210

**Associated Equipment**

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): DCL-1040  
Emissions Control Equipment ID Number: CE-DCL-1210  
Emissions Control Equipment Description: Baghouse  
Continuous Emissions Monitors ID Numbers: N/A

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Emission Unit vented through this Emission Point: DCL-1040  
Emission Unit Description: Portable Vacuum Transfer for Development Center for Liquids Plant  
Raw Material/Fuel: Herbicide  
Rated Capacity: 2,500 lbs/hr

**Applicable Requirements**

**Emission Limits (lb/hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity  
Emission Limit(s): 40% (1)  
Authority for Requirement: 567 IAC 23.3(2)"d"  
DNR Construction Permit 17-A-009-S1

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM$_{2.5}$  
Emission Limit(s): 0.10 lb/hr  
Authority for Requirement: DNR Construction Permit 17-A-009-S1

Pollutant: Particulate Matter (PM)  
Emission Limit(s): 0.10 lb/hr, 0.1 gr/dscf  
Authority for Requirement: 567 IAC 23.3(2)"a"  
DNR Construction Permit 17-A-009-S1

Pollutant: Volatile Organic Compounds (VOC)  
Emission Limit(s): 28 tons/yr  
Authority for Requirement: DNR Construction Permit 17-A-009-S1

Pollutant: Single Hazardous Air Pollutant  
Emission Limit(s): 9 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-009-S1

Pollutant: Total Hazardous Air Pollutants
Emission Limit(s): 23 tons/yr
Authority for Requirement: DNR Construction Permit 17-A-009-S1

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.
B. For each product produced in the Development Center for Liquids Plant, the owner or operator shall identify and document each VOC and HAP containing material processed, used, or generated.
C. The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials processed, used, or generated, used in the Development Center for Liquids Plant.
D. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

Control Equipment Requirements

E. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

VOC and HAP Recordkeeping for Emission Caps
The following monitoring and recordkeeping requirements are used to show compliance with the VOC, Single HAP, and Total HAP emission limit caps in the emission limit section of this permit. The Single HAP emissions are defined as the emissions of any individual HAP emitted by the emission episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF. The Total HAP emissions are defined as the sum of all Single HAP emitted by the episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF.

The emission limits caps cover the following emission episodes from the emission units covered by the permits for emission points EP-DCL, EP-DCL-CV, and EP-DCL-1210 for the production of products made in the Development Center for Liquids Plant:
Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating

The VOC and HAP emission limits also covers emissions from any Drum Heating performed for products made in the Development Center for Liquids Plant.

F. For each product produced in the emission units covered by the permits for emission points EP-DCL, EP-DCL-CV, and EP-DCL-1210, that uses a VOC-containing or HAP-containing material, the permittee shall determine and record the VOC, Single HAP, and Total HAP emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product and standard and nonstandard batch.

(2) The permittee shall identify and record each emission episode (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each batch.

(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition F.4. The facility shall document and provide a justification for the value of each input used.

(4) The permittee shall calculate and record the VOC, Single HAP, and Total HAP emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).
c. For emissions from Gas Sweep/Purging the appropriate equations and methods
defined in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission
Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8,
Methods for Estimating Air Emissions from Paint, Ink, and Other Coating
Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for
Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2
shall be used.

d. For emissions from Evaporation the appropriate equations and methods
provided in Emission Inventory Improvement Program (EIIP) EPA documents:
Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink,
and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2,
Chapter 16, Methods for Estimating Air Emissions from Chemical
Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and
empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40
CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as
described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be
used.

f. For other batch emission episodes in the production of products, appropriate
estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart
GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable,
stack testing or standard engineering principles shall be used to best represent
the emission rate from the unit.

The facility shall document and provide a justification for the emission factors or emission
estimation methods for each emission episode.

(5) The facility shall document whether each emission episode is regulated by 40 CFR
Part 63 Subpart FFFF and provide justification for each emission episodes that is
not regulated by the subpart.

(6) The facility shall calculate and document the VOC, Single HAP, and Total HAP
emission rate per batch for each batch for each product by summing the emission
rate per batch of each emission episode.

G. The permittee shall record each batch completed as a standard or nonstandard batch.

a. The permittee shall use the operating scenarios required in F.A.3 above that
define the standard batch in order to make the determination of whether the
batch is standard or nonstandard.

H. The permittee shall maintain the following daily records for the emission units/episodes
covered by the VOC, Single HAP, and Total HAP ton per year emission limit caps in
the emission limit section of this permit:

(1) The identification of each VOC-containing or HAP-containing material processed,
used, or generated; as required to calculate the VOC and HAP emissions for the
emission limit caps.

(2) The daily number of standard or nonstandard batches for each product.
I. The permittee shall maintain the following monthly records for the for the emission units/episodes covered by the VOC, Single HAP, and Total HAP ton per year emission limit caps in the emission limit section of this permit:

1. The number of standard and nonstandard batches and the corresponding VOC emissions, for each product, in tons.
2. The total amount of VOC emissions for each product, in tons.
3. The total amount of VOC emissions for all products, in tons.
4. The 12-month rolling total of the amount of VOC emissions from all products, in tons.
5. The number of standard and nonstandard batches and the corresponding Single HAP emissions, for each product, in tons.
6. The total amount of Single HAP emissions for each product, in tons.
7. The total amount of Single HAP emissions for all products, in tons.
8. The 12-month rolling total of the amount of Single HAP emissions from all products, in tons.
9. The number of standard and nonstandard batches and the corresponding Total HAP emissions, for each product, in tons.
10. The total amount of Total HAP emissions for each product, in tons.
11. The total amount of Total HAP emissions for all products, in tons.
12. The 12-month rolling total of the amount of Total HAP emissions from all products, in tons.

The Single HAP emissions is the emissions of any individual HAP emitted by the emission episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF. The Total HAP emissions is the sum of all Single HAP emitted by the episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF.

J. If the 12-month rolling total of the VOC emissions exceeds 20.0 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

1. The number of standard and nonstandard batches and the corresponding VOC emissions, for each product, in tons.
2. The total amount of VOC emissions for each product, in tons.
3. The total amount of VOC emissions for all products, in tons.
4. The 365-day rolling total of the amount of VOC emissions from all products, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 20.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 20.0 tons, daily recordkeeping will be required per this Condition of this permit.
K. If the 12-month rolling total of any Single HAP emitted from all emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit which are regulated by 40 CFR Part 63 Subpart FFFF exceeds 7.0 tons, the permittee shall immediately begin keeping the following daily records:

1. The number of standard and nonstandard batches and the corresponding Single HAP emissions, for each product, in tons.
2. The total amount of Single HAP emissions for each product, in tons.
3. The total amount of Single HAP emissions for all products, in tons.
4. The 365-day rolling total of the amount of Single HAP emissions from all products, in tons.

Daily calculations of each single HAP emissions shall continue until the 365-day rolling total of the amount of all each single HAP emissions from all emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit which are regulated by 40 CFR Part 63 Subpart FFFF drops below 7.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of each single HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 7.0 tons, daily recordkeeping will be required per this Condition of this permit.

L. If the 12-month rolling total of total HAP emissions from all emission units/episodes covered by the Total HAP ton per year emission limit caps in the emission limit section of this permit which are regulated by 40 CFR Part 63 Subpart FFFF exceeds 18.0 tons, the permittee shall immediately begin keeping the following daily records:

1. The number of standard and nonstandard batches and the corresponding Total HAP emissions, for each product, in tons.
2. The total amount of Total HAP emissions for each product, in tons.
3. The total amount of Total HAP emissions for all products, in tons.
4. The 365-day rolling total of the amount of Total HAP emissions from all products, in tons.

Daily calculations of total HAP emissions shall continue until the 365-day rolling total of the amount of total HAP emissions from all emission units/episodes covered by the Total HAP ton per year emission limit caps in the emission limit section of this permit which are regulated by 40 CFR Part 63 Subpart FFFF drops below 18.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of total HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 18.0 tons, daily recordkeeping will be required per this Condition of this permit.

NSPS and NESHAP Requirements

M. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing—Subpart FFFF.

1. The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.
N. All batch process vents associated with the Development Center for Liquids Plant shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the Development Center for Liquids Plant, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (Development Center for Liquids Plant) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

(3) As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

(4) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525s (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:

   i. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.

   ii. A record of whether each batch operated was considered a standard batch.

   iii. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

   iv. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

O. Any continuous process vents associated with the Development Center for Liquids Plant shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the Development Center for Liquids Plant, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2455 (b), for each continuous process vent in the Development Center for Liquids Plant, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).
(3) As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide a report as specified in paragraph § 63.2520 (e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

P. Any wastewater streams associated with Development Center for Liquids Plant shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.

(1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

Q. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

R. The facility shall analyze any changes in formulations and determine if there is a change in applicability for any NSPS or NESHAP subparts for Development Center for Liquids Plant.

(1) The facility shall document the results of any NSPS or NESHAP determinations as required above.

Authority for Requirement: DNR Construction Permit 17-A-009-S1

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 17-A-009-S1
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): Vents Indoors  
Stack Opening, (inches, dia.): Vents Indoors  
Exhaust Flow Rate (scfm): Vents Indoors  
Exhaust Temperature (°F): Vents Indoors  
Discharge Style: Vents Indoors  
Authority for Requirement: DNR Construction Permit 17-A-009-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☑  
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☑  
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☑

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number: DCL-CV**

### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>T3258-Aqueous Tank (EU DCL- T3258)</td>
<td>None</td>
<td>1,000 gallons</td>
</tr>
<tr>
<td>T3259-Oil Tank (EU DCL- T3259)</td>
<td>None</td>
<td>1,000 gallons</td>
</tr>
<tr>
<td>T3260-Formulator Tank (EU DCL-T3260)</td>
<td>None</td>
<td>1,000 gallons</td>
</tr>
<tr>
<td>T3261-Pack Tank (EU DCL- T3261)</td>
<td>None</td>
<td>1,000 gallons</td>
</tr>
<tr>
<td>T3262-Shar Tank (EU DCL- T3262)</td>
<td>None</td>
<td>500 gallons</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide Ingredients

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

**Pollutant:** Volatile Organic Compounds (VOC)
**Emission Limit(s):** 28 tons/yr
**Authority for Requirement:** DNR Construction Permit 17-A-007-S1

**Pollutant:** Single Hazardous Air Pollutant
**Emission Limit(s):** 9 lb/hr
**Authority for Requirement:** DNR Construction Permit 17-A-007-S1

**Pollutant:** Total Hazardous Air Pollutants
**Emission Limit(s):** 23 tons/yr
**Authority for Requirement:** DNR Construction Permit 17-A-007-S1

**Operating Requirements with Associated Monitoring and Recordkeeping**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For each product produced in the Development Center for Liquids Plant, the owner or operator shall identify and document each VOC and HAP containing material processed, used, or generated.

C. The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials processed, used, or generated in the Development Center for Liquids Plant.

D. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

(1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

**VOC and HAP Recordkeeping for Emission Caps**

The following monitoring and recordkeeping requirements are used to show compliance with the VOC, Single HAP, and Total HAP emission limit caps in Condition 1 of this permit. The Single HAP emissions are defined as the emissions of any individual HAP emitted by the emission episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF. The Total HAP emissions are defined as the sum of all Single HAP emitted by the episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF.

The emission limits caps cover the following emission episodes from the emission units covered by the permits for emission points EP-DCL, EP-DCL-CV, and EP-DCL-1210 for the production of products made in the Development Center for Liquids Plant:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Gas Sweep
- Solids Handling
- Evaporation from Screens and Tank Evaporation
- Heating

The VOC and HAP emission limits also covers emissions from any Drum Heating performed for products made in the Development Center for Liquids Plant.

E. For each product produced in the emission units covered by the permits for emission points EP-DCL, EP-DCL-CV, and EP-DCL-1210, that uses a VOC-containing or HAP-containing material, the permittee shall determine and record the VOC, Single HAP, and Total HAP emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

(1) The permittee shall identify and document each product and standard and nonstandard batch.

(2) The permittee shall identify and record each emission episode (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each batch.
(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition E.43. The facility shall document and provide a justification for the value of each input used.

(4) The permittee shall calculate and record the VOC, Single HAP, and Total HAP emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.
f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide a justification for the emission factors or emission estimation methods for each emission episode.

(5) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF and provide justification for each emission episodes that is not regulated by the subpart.

(6) The facility shall calculate and document the VOC, Single HAP, and Total HAP emission rate per batch for each batch for each product by summing the emission rate per batch of each emission episode.

F. The permittee shall record each batch completed as a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in EA.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

G. The permittee shall maintain the following daily records for the emission units/episodes covered by the VOC, Single HAP, and Total HAP ton per year emission limit caps in the emission limit section of this permit:

(1) The identification of each VOC-containing or HAP-containing material processed, used, or generated; as required to calculate the VOC and HAP emissions for the emission limit caps.

(2) The daily number of standard or nonstandard batches for each product.

H. The permittee shall maintain the following monthly records for the for the emission units/episodes covered by the VOC, Single HAP, and Total HAP ton per year emission limit caps in the emission limit section of this permit:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product, in tons.

(2) The total amount of VOC emissions for each product, in tons.

(3) The total amount of VOC emissions for all products, in tons.

(4) The 12-month rolling total of the amount of VOC emissions from all products, in tons.

(5) The number of standard and nonstandard batches and the corresponding Single HAP emissions, for each product, in tons.

(6) The total amount of Single HAP emissions for each product, in tons.

(7) The total amount of Single HAP emissions for all products, in tons.
The 12-month rolling total of the amount of Single HAP emissions from all products, in tons.

The number of standard and nonstandard batches and the corresponding Total HAP emissions, for each product, in tons.

The total amount of Total HAP emissions for each product, in tons.

The total amount of Total HAP emissions for all products, in tons.

The 12-month rolling total of the amount of Total HAP emissions from all products, in tons.

The Single HAP emissions is the emissions of any individual HAP emitted by the emission episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF. The Total HAP emissions is the sum of all Single HAP emitted by the episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF.

I. If the 12-month rolling total of the VOC emissions exceeds 20.0 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

1. The number of standard and nonstandard batches and the corresponding VOC emissions, for each product, in tons.
2. The total amount of VOC emissions for each product, in tons.
3. The total amount of VOC emissions for all products, in tons.
4. The 365-day rolling total of the amount of VOC emissions from all products, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 20.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 20.0 tons, daily recordkeeping will be required per this Condition of this permit.

J. If the 12-month rolling total of any Single HAP emitted from all emission units/episodes covered by the Single HAP ton per year emission limit cap in Condition 1 of this permit which are regulated by 40 CFR Part 63 Subpart FFFF exceeds 7.0 tons, the permittee shall immediately begin keeping the following daily records:

1. The number of standard and nonstandard batches and the corresponding Single HAP emissions, for each product, in tons.
2. The total amount of Single HAP emissions for each product, in tons.
3. The total amount of Single HAP emissions for all products, in tons.
4. The 365-day rolling total of the amount of Single HAP emissions from all products, in tons.

Daily calculations of each single HAP emissions shall continue until the 365-day rolling total of the amount of all each single HAP emissions from all emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit which are
regulated by 40 CFR Part 63 Subpart FFFF drops below 7.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of each single HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 7.0 tons, daily recordkeeping will be required per this Condition of this permit.

K. If the 12-month rolling total of total HAP emissions from all emission units/episodes covered by the Total HAP ton per year emission limit caps in the emission limit section of this permit which are regulated by 40 CFR Part 63 Subpart FFFF exceeds 18.0 tons, the permittee shall immediately begin keeping the following daily records:

1. The number of standard and nonstandard batches and the corresponding Total HAP emissions, for each product, in tons.
2. The total amount of Total HAP emissions for each product, in tons.
3. The total amount of Total HAP emissions for all products, in tons.
4. The 365-day rolling total of the amount of Total HAP emissions from all products, in tons.

Daily calculations of total HAP emissions shall continue until the 365-day rolling total of the amount of total HAP emissions from all emission units/episodes covered by the Total HAP ton per year emission limit caps in the emission limit section of this permit which are regulated by 40 CFR Part 63 Subpart FFFF drops below 18.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of total HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 18.0 tons, daily recordkeeping will be required per this Condition of this permit.

NSPS and NESHAP Requirements

L. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

1. The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

M. All batch process vents associated with the Development Center for Liquids Plant shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

1. The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the Development Center for Liquids Plant, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

2. As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (Development Center for Liquids Plant) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

3. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with
the Group 1 requirements beginning on the date the switch occurs and provide
notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii). An initial
compliance demonstration as specified in this subpart must be conducted within
150 days after the switch occurs. The facility shall obtain the proper permit
modifications for this change as specified in 567 IAC 22.1.

(4) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs
§ 63.2525s (e)(1) through e(3) is met, the owner or operator must keep records of
the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
i. A record of the day each batch was completed and/or the operating hours per
day for continuous operations with hydrogen halide and halogen emissions.
ii. A record of whether each batch operated was considered a standard batch.
iii. The estimated uncontrolled and controlled emissions for each batch that is
considered to be a nonstandard batch.
iv. Records of the daily 365-day rolling summations of emissions, or alternative
records that correlate to the emissions (e.g., number of batches), calculated no
less frequently than monthly.

N. Any continuous process vents associated with the Development Center for Liquids
Plant shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part
63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify and determine and document the type
(continuous or batch) and group status for all process vents associated with the
Development Center for Liquids Plant, according to 40 CFR Part 63 Subpart FFFF,
63.2550.

(2) As specified in § 63.2455 (b), for each continuous process vent in the Development
Center for Liquids Plant, the facility shall determine and document the total
resource effectiveness (TRE) index value, as specified in § 63.115(d), except as
specified in paragraphs § 63.2455 (b)(1) through (3).

(3) As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1
emission point after the compliance date, the owner or operator must comply with
the Group 1 requirements beginning on the date the switch occurs and provide a
report as specified in paragraph § 63.2520 (e)(10)(ii)(C). An initial compliance
demonstration as specified in this subpart must be conducted within 150 days after
the switch occurs. The facility shall obtain the proper permit modifications for this
change as specified in 567 IAC 22.1.

O. Any wastewater streams associated with Development Center for Liquids Plant shall
operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart
FFFF, 63.2485 and the requirements referenced therein.

(1) The owner or operator shall meet all of the applicable reporting and recordkeeping
requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525,
and the requirements referenced therein, including applicable requirements
specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

P. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission
point after the compliance date, the owner or operator must comply with the Group 1
requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

Q. The facility shall analyze any changes in formulations and determine if there is a change in applicability for any NSPS or NESHAP subparts for Development Center for Liquids Plant.
   (1) The facility shall document the results of any NSPS or NESHAP determinations as required above.

Authority for Requirement: DNR Construction Permit 17-A-007-S1

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 17-A-009-S1
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 10
Stack Opening, (inches, dia.): 3
Exhaust Flow Rate (scfm): Displacement
Exhaust Temperature (°F): 70
Discharge Style: Downward

Authority for Requirement: DNR Construction Permit 17-A-009-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Approved Operation &amp; Maintenance Plan Required?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
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<td></td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number:** DCL-EL

**Associated Equipment**

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): DCL-EL

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Emission Unit vented through this Emission Point: DCL-EL
Emission Unit Description: Equipment Leak for Development Center for Liquids Plant
Raw Material/Fuel: Herbicide
Rated Capacity: N/A

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

None at this time.

**Authority for Requirement:** DNR Construction Permit 17-A-010

**Operating Requirements with Associated Monitoring and Recordkeeping**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. The Development Center for Liquids Plant shall have a maximum of 248 liquid valves, 11 liquid pumps, 1485 connectors, 28 open-ended lines, and 26 sample connections. The process shall not have any gas valves, compressors, agitators or pressure relief valves.
   (1) The owner or operator shall count and document the number and types of components used at the plant. Components include but are not limited to valves, pumps, compressor seals, flanges, etc. The company shall modify the component count whenever the number of components change.

B. All process equipment for the Development Center for Liquids Plant shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

C. For each product produced in the Development Center for Liquids Plant, the owner or operator shall identify and document each VOC-containing or HAP-containing material used.
D. The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials used in the Development Center for Liquids Plant.

**NESHAP Subpart FFFF Requirements**

E. The facility shall analyze any changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the Development Center for Liquids Plant.
   (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

F. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

Authority for Requirement: DNR Construction Permit 17-A-010

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 17-A-010
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes [x] No [ ]

Facility Maintained Operation & Maintenance Plan Required? Yes [x] No [ ]

Compliance Assurance Monitoring (CAM) Plan Required? Yes [x] No [ ]

Authority for Requirement: 567 IAC 22.108(3)
### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drum Dump (EU 4421)</td>
<td>Sock Filter (CE 4440)</td>
<td>1,500 lb/hr</td>
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<tr>
<td>Micro Ingredient System (EU 4401)</td>
<td>Super Sac Baghouse (CE 4423)</td>
<td>1,500 lb/hr</td>
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<tr>
<td>Drum Weighing Station (EU 4435)</td>
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<td>Super Sac Batching (EU 4402)</td>
<td>Super Sac Baghouse (CE 4423)</td>
<td>1,500 lb/hr</td>
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<tr>
<td>Lump Breaker (EU 4433)</td>
<td>NA(1)</td>
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<tr>
<td>Pneumatic Conveyance (EU 4437)</td>
<td>Blender #1 Baghouse (CE 4424)</td>
<td>1,500 lb/hr</td>
</tr>
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<td>Blender #1 Pneumatic Receiver (EU 4445)</td>
<td>Blender #1 Baghouse (CE 4424)</td>
<td>1,500 lb/hr</td>
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<tr>
<td>Blender #1 (EU 4404)</td>
<td>Blender #1 Baghouse (CE 4424)</td>
<td>1,500 lb/hr</td>
</tr>
<tr>
<td>Hammer Mill Feed Screws (EU 4405)</td>
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<tr>
<td>Hammer Mill (EU 4406)</td>
<td>Blender #2 Baghouse (CE 4425)</td>
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<td>Blender #2 (EU 4407)</td>
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<td>Air Mill (EU 4409)</td>
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<td>BDF Baghouse (CE 4427)</td>
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<td>BDF Hopper (EU 4412)</td>
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<td>Pan Granulator (EU 4436)</td>
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<td>Dryer (EU 4416)</td>
<td>Dryer Baghouse (CE 4428)</td>
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<td>Recycle Hopper Baghouse (CE 4429)</td>
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<td>Finished Product Hopper (EU 4420)</td>
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<td>Recycle Hopper (EU 4419)</td>
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<td>HVFS (EU 44HVFS)</td>
<td>Vacuum System Baghouse (CE 4422)</td>
<td>1,000 lb/hr</td>
</tr>
</tbody>
</table>

**Final Baghouse (CE 4430), HEPA Filter (CE 4431), and Regenerative Thermal Oxidizer, 3 MMBtu/hr (CE-DF10-RTO) (3)**
Raw Material/Fuel: Herbicide Ingredients

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 12-A-494-S4

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM<sub>2.5</sub>
Emission Limit(s): 0.22 lb/hr
Authority for Requirement: DNR Construction Permit 12-A-494-S4

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.22 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 12-A-494-S4

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)
Emission Limit(s): 500 ppm<sub>v</sub>
Authority for Requirement: 567 IAC 23.3(2)"e"
DNR Construction Permit 12-A-494-S4

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 3.18 lbs/hr
Authority for Requirement: DNR Construction Permit 12-A-494-S4

Pollutant: Single Hazardous Air Pollutant
Emission Limit(s): 2.05 lb/hr
Authority for Requirement: DNR Construction Permit 12-A-494-S4

Pollutant: Total Hazardous Air Pollutants
Emission Limit(s): 5.25 tons/yr
Authority for Requirement: DNR Construction Permit 12-A-494-S4

Pollutant: Total Organic Hazardous Air Pollutants
Emission Limit(s): 98% Reduction or 20 ppm<sub>v</sub> (2)
Authority for Requirement: DNR Construction Permit 12-A-494-S4
(2) The emission limit is for Group 1 continuous process vents in Table 1 to Subpart FFFF of Part 63 – Emission Limits and Work Practice Standards for Continuous Process Vents. Reduce emissions of Total Organic HAP by ≥ 98 percent by weight or to an outlet process concentration ≤ 20 ppm, as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except a flare). The facility shall be in compliance with the emission limit at all times, except during periods of startup, shutdown, and malfunction (SSM).

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements

A. All process and control equipment for DF-10 shall be operated and maintained according to manufacturer specifications and maintenance schedule.

(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The facility shall only combust natural gas or propane in the Dryer (EU 4416).

C. The average hourly production rate of this plant (DF-10) shall not exceed 1,500 pounds per hour (lbs/hr) calculated on a daily basis.

(1) The facility shall calculate and record the average hourly production rate (lbs/hr) of this plant (DF-10):

(a) The facility shall record the amount of product produced by DF-10, in pounds, on a daily basis;

(b) The facility shall record the hours of operation for DF-10, on a daily basis. The hours of operation for the process is defined as the amount of time that the Final Baghouse (CE 4430) operates;

(c) The facility shall calculate and record on a daily basis the average hourly production rate (lbs/hr) for DF-10 based on the daily amount of product produced and daily hours of operation.

D. For each product produced in the DF-10 plant, the owner or operator shall identify and document each VOC and HAP containing material used or produced.

E. The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials used or produced in the DF-10 plant.

F. The facility is limited to operating DF-10 a maximum of 7,400 hours per rolling 12-month period.

(1) The owner or operator shall record on a monthly basis, the number of hours that DF-10 operated, and the rolling 12-month total amount of hours that DF-10 operated.

G. The owner or operator shall operate the control equipment at all times when emissions are vented to them.
H. All process and control equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.

(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the control and process equipment for this process.

I. The differential pressure drop across the Final Baghouse (4430) shall be maintained between 1.0 and 7.0 inches water column except during periods of filter replacement.

(1) The owner or operator shall collect and record the pressure drop across Final Baghouse (4430), in inches of water, on a continuous basis. If the pressure drop across the Final Baghouse (4430) falls outside the range specified above, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall also collect and record the pressure drop across all other baghouses associated with this permit, in inches of water, on a daily basis. If the pressure drop across any of these baghouses falls outside the range specified by the manufacture, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the process is not in operation.

J. The auxiliary fuel combusted in the Regenerative Thermal Oxidizer (CE-DF10-RTO) shall be limited to natural gas or propane.

K. The owner or operator shall maintain the temperature (1-hour average) of the Regenerative Thermal Oxidizer (CE-DF10-RTO) during operation of no less than 50 degrees Fahrenheit below the average temperature recorded during the most recent performance test which demonstrated compliance with the VOC and HAP emission limits.

(a) The owner or operator shall install, calibrate, operate, and maintain equipment necessary to continuously monitor the temperature of the Regenerative Thermal Oxidizer (CE-DF10-RTO). This equipment shall be installed, operated, and maintained in accordance with the facility’s operation and maintenance plan.

(b) The owner or operator shall collect and record the temperature of the Regenerative Thermal Oxidizer (CE-DF10-RTO) at a minimum of once every 15 minutes and calculate and record the 1-hour block average. The 1-hour block average shall be calculated using all data points collected during the averaging period.

(c) The owner or operator shall retain the most recent stack tests for the Regenerative Thermal Oxidizer (CE-DF10-RTO) that demonstrated compliance with the VOC and HAP emission limits. The permittee shall document the average temperature recorded during those tests, and calculate and document the minimum temperature the Regenerative Thermal Oxidizer (CE-DF10-RTO) shall operate above (50 degrees Fahrenheit below the average temperature recorded during most recent the VOC and HAP performance test which demonstrated compliance with the VOC and HAP emission limits).

NSPS and NESHAP Requirements

L. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical
Manufacturing-Subpart FFFF], including those not specifically mentioned in this
permit.

(1) The owner or operator shall be in compliance with the emission limits and work
practice standards in Tables 1 to this subpart at all times, except during periods of
startup, shutdown, and malfunction (SSM), and the applicable requirements
specified in §§63.2455 for all continuous process vents.

(2) The owner or operator shall develop and implement a written startup, shutdown,
and malfunction plan (SSMP) according to the provisions in 40 CFR §63.6(e). Per
40 CFR §63.2525(j), the SSMP is not required to include Group 2 emission points,
unless those emission points are used in an emissions average. For equipment
leaks, the SSMP requirement is limited to control devices and it is optional for other
equipment.

(3) The owner or operator shall meet all of the applicable notification, reporting, and
recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515,
§63.2520, and §63.2525.

M. All batch process vents that are part of the miscellaneous organic chemical process unit
for the DF-10 process shall operate as Group 2 Batch Process Vents, as specified in 40
CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify and determine and document the type
(continuous or batch) and group status for all process vents associated with the DF-
10 process, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2460 (b), the owner or operator shall determine and document
the group status of the batch process vents by determining and summing the
uncontrolled organic HAP emissions from each of the batch process vents within
the process (the DF-10 process) using the procedures specified in § 63.1257(d)(2)(i)
and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

(3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs
§ 63.2525s (e)(1) through e(3) is met, the owner or operator must keep records of
the information specified in paragraphs (e)(4)(i) through (iv), as applicable:

(a) A record of the day each batch was completed and/or the operating hours per
day for continuous operations with hydrogen halide and halogen emissions.

(b) A record of whether each batch operated was considered a standard batch.

(c) The estimated uncontrolled and controlled emissions for each batch that is
considered to be a nonstandard batch.

(d) Records of the daily 365-day rolling summations of emissions, or alternative
records that correlate to the emissions (e.g., number of batches), calculated no
less frequently than monthly.

N. All continuous process vents that are part of the miscellaneous organic chemical
process unit for the DF-10 process shall be in compliance with the emission limits and
work practice standards in Tables 1 to this subpart at all times, except during periods
of startup, shutdown, and malfunction (SSM), and meet the applicable requirements
specified in §§63.2455.

(1) The owner or operator shall identify and determine and document the type
(continuous or batch) and group status for all process vents associated with the DF-
10 process, according to 40 CFR Part 63 Subpart FFFF, 63.2550.
(2) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements for continuous process vents specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

O. As required by 40 CFR §63.2450(e)(1), the owner or operator reducing organic HAP emissions through a closed-vent system to any combination of control devices (except a flare) shall comply with the applicable requirements in §63.982(c) and the requirements referenced therein.

(1) The owner or operator shall meet all of the applicable recordkeeping requirements for closed-vent system, as specified in 40 CFR Part 63 Subpart FFFF and §63.998(d), and the requirements referenced therein.

P. As specified in §63.988, a temperature monitoring device capable of providing a continuous record of the temperature of the Regenerative Thermal Oxidizer (CE-DF10-RTO) is required. As specified in §63.988(c)(1), the temperature monitoring device shall be installed in the fire box or in the ductwork immediately downstream of the fire box in a position before any substantial heat exchange occurs.

Q. As specified in §63.996(c), the following conditions for the temperature monitoring system shall be followed:

(1) All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(2) The owner or operator shall maintain and operate the equipment in a manner consistent with good air pollution control practices.

(a) The owner or operator shall ensure the immediate repair or replacement of parts to correct "routine" or otherwise predictable equipment malfunctions. The necessary parts for routine repairs of the affected equipment shall be readily available.

(b) The owner or operator shall develop and follow a start-up, shutdown, and malfunction plan, and equipment must be repaired immediately, this action shall be recorded as specified in §63.998(c)(1)(ii)(E).

(3) All monitoring equipment shall be installed and operational, and the data verified as specified in Subpart FFFF or SS either prior to or in conjunction with conducting performance tests. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(4) All monitoring equipment shall be installed such that representative measurements of parameters from the regulated source are obtained.

(5) In accordance with the 40 CFR Part 63 Subpart FFFF, except for system breakdowns, repairs, maintenance periods, instrument adjustments, or checks to maintain precision and accuracy, calibration checks, and zero and span adjustments, the temperature monitoring systems shall be in continuous operation when emissions are being routed to the monitored device.

(6) The owner or operator shall establish a range for monitored parameters that indicates proper operation of the Regenerative Thermal Oxidizer (CE-DF10-RTO).
In order to establish the range, the information required in §63.999(b)(3) shall be submitted in the Notification of Compliance Status or the operating permit application or amendment. The range may be based upon a prior performance test meeting the specifications of §63.997(b)(1) or a prior TRE index value determination, as applicable, or upon existing ranges or limits established under 40 CFR Part 63 Subpart FFFF.

R. The owner or operator shall meet all of the applicable recordkeeping requirements for the temperature monitoring system, as specified in 40 CFR Part 63 Subpart FFFF, §63.2525, §63.998(b), §63.998(c) and §63.998(d), and the requirements referenced therein. This includes records of the daily average value of the temperature of the Regenerative Thermal Oxidizer (CE-DF10-RTO) for each operating day determined according to the procedures specified in §63.998(b)(3)(i) and (ii) and records of periods when the temperature drops below the operating range established pursuant to §63.996(c)(6) as specified in §63.998(d).

S. All wastewater streams that are part of the miscellaneous organic chemical process unit for the DF-10 process shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.

(1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

T. As specified in §63.2445(d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph §63.2460(b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

U. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the DF-10 process.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 12-A-494-S4

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 12-A-494-S4

40 CFR 63 Subpart FFFF

567 IAC 23.1(4)"cf"
**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 76
Stack Opening, (inches, dia.): 30
Exhaust Flow Rate (scfm): 13,000
Exhaust Temperature (°F): 225
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 12-A-494-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

<table>
<thead>
<tr>
<th>Agency Approved Operation &amp; Maintenance Plan Required?</th>
<th>Yes ☒ No ☐</th>
</tr>
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<tbody>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td>Yes ☒ No ☐</td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td>Yes ☒ No ☐</td>
</tr>
</tbody>
</table>

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: DF-11

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk Bag Unloader (EU 5000)</td>
<td>Nuisance Baghouse (CE 5042)</td>
<td>5,000 lb/hr</td>
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<tr>
<td>Drum Dump (EU 5001)</td>
<td>Nuisance Baghouse (CE 5042)</td>
<td>5,000 lb/hr</td>
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<tr>
<td>Batching Hopper (EU 5002)</td>
<td>Nuisance Baghouse (CE 5042)</td>
<td>2,000 lb/hr</td>
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<tr>
<td>Lump Breaker (EU 5004)</td>
<td>Nuisance Baghouse (CE 5042)</td>
<td>5,000 lb/hr</td>
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<td>Drum Weighing Station (EU 5007)</td>
<td>Nuisance Baghouse (CE 5042)</td>
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<td>Sock Filter (CE 3353)</td>
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<td>ACM (EU 5014)</td>
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<td>Mill Filter (CE 5016)</td>
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<td>Pneumatic Conveyance (EU 5056)</td>
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<tr>
<td>Blender #4 (EU 5021)</td>
<td>Sock Filter (CE 3350)</td>
<td>2,000 lb/hr</td>
</tr>
<tr>
<td>LIW Feeder and Hopper (EU 5024)</td>
<td>None</td>
<td>2,500 lb/hr</td>
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<td>Kneader Feeder Auger(EU 5051)</td>
<td>Sock Filter (CE 3351)</td>
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<td>Kneader Feeder (EU 5026)</td>
<td>Nuisance Baghouse (CE 5042)</td>
<td>2,500 lb/hr</td>
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<td>Basket Extruder (EU 5028)</td>
<td>Nuisance Baghouse (CE 5042)</td>
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<td>Radial Extruder (EU 5029)</td>
<td>Nuisance Baghouse (CE 5042)</td>
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<td>Twin Dome Extruder (EU 5050)</td>
<td>Nuisance Baghouse (5042)</td>
<td>2,000 lb/hr</td>
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<td>Vibratory Fluid Bed Dryer (EU 5030)</td>
<td>Dryer Baghouse (CE 5032)</td>
<td>1,700 lb/hr, 3.0 MMBtu/hr</td>
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<td>Rotary Screener (EU 5035)</td>
<td>Recycle Baghouse (CE 5040)</td>
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<td>Vibratory Screener (EU 5036)</td>
<td>Recycle Baghouse (5040)</td>
<td>2,500 lb/hr</td>
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<td>Finished Product Hopper (EU 5037)</td>
<td>Recycle Baghouse (CE 5040)</td>
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<td>Bulk Bag Filler/Drum-Filler (EU 5038)</td>
<td>Recycle Baghouse (CE 5040)</td>
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<td>Recycle Hopper (EU 5039)</td>
<td>Recycle Baghouse (CE 5040)</td>
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<td>Packaging Equipment (EU 5049)</td>
<td>Recycle Baghouse (CE 5040)</td>
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<td>Pneumatic Conveyance (EU 5053)</td>
<td>Recycle Baghouse (CE 5040)</td>
<td>2,000 lb/hr</td>
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<td>Pneumatic Conveyance (EU 5054)</td>
<td>Nuisance Baghouse (CE 5042)</td>
<td>2,000 lb/hr</td>
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<td>Housekeeping Vacuum System (50HVFS)</td>
<td>Vacuum Baghouse (CE 5045)</td>
<td>NA</td>
</tr>
<tr>
<td>DF #11 Portable Lump Breaker (EU 5052)</td>
<td>None</td>
<td>1,000 lb/hr</td>
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</tbody>
</table>

Raw Material/Fuel: Herbicide Ingredients

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 14-A-555-S3
An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

**Pollutant:** PM$_{2.5}$  
**Emission Limit(s):** 0.29 lb/hr  
**Authority for Requirement:** DNR Construction Permit 14-A-555-S3

**Pollutant:** Particulate Matter (PM)  
**Emission Limit(s):** 0.29 lb/hr, 0.1 gr/dscf  
**Authority for Requirement:** 567 IAC 23.3(2)"a"  
DNR Construction Permit 14-A-555-S3

**Pollutant:** Sulfur Dioxide (SO$_2$)  
**Emission Limit(s):** 500 ppm$_v$  
**Authority for Requirement:** 567 IAC 23.3(2)"e"  
DNR Construction Permit 14-A-555-S3

**Pollutant:** Volatile Organic Compounds (VOC)  
**Emission Limit(s):** 7.75 lbs/hr  
**Authority for Requirement:** DNR Construction Permit 14-A-555-S3

**Operating Requirements with Associated Monitoring and Recordkeeping**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. The liquid materials employed in the production of the DF-11 products shall not contain any Volatile Organic Compounds (VOCs).

B. The facility shall only combust natural gas or propane in the Vibratory Fluid Bed Dryer (EU 5030).

C. The average hourly production rate of this plant (DF-11) shall not exceed 1,615 pounds per hour (lbs/hr) calculated on a daily basis.
   
   (1) The facility shall calculate and record the average hourly production rate (lbs/hr) of this plant (DF-11):
   
   (a) The facility shall record the amount of product produced by DF-11, in pounds, on a daily basis;
(b) The facility shall record the hours of operation for DF-11, on a daily basis. The hours of operation for the process is defined as the amount of time that the Final Baghouse (CE 4130) operates;

(c) The facility shall calculate and record on a daily basis the average hourly production rate (lbs/hr) for DF-11 based on the daily amount of product produced and daily hours of operation.

D. As specified in Condition 2, VOC testing shall be conducted under worst case conditions that are expected to result in the highest VOC emission rates. If process changes are made that result in a new worst-case condition that could reasonably be expected to increase VOC emissions, the facility shall perform emissions testing within 90 days of the change or request a determination from the IDNR.

1. The facility shall document all products made and the corresponding operating scenarios.

2. The facility shall estimate total VOC emissions for all operating scenarios. The estimates shall be performed using the emission estimation methods specified in conditions N(2) and O(2) of this Condition or other IDNR approved methods. The facility shall document all information need to perform the calculation, including, but not limited to: calculation methods, emission episodes, materials used, process temperatures, and process pressures.

3. The facility shall document the worst-case condition for VOC, Single HAP, and Total HAP. This will include the product made, the corresponding operating scenario, and the VOC, Single HAP, and Total HAP emissions rates.

4. The facility shall document the date of the tests performed for each worst-case condition for VOC, Single HAP, and Total HAP and the results of those tests.

5. The facility shall document the date of any process changes that results in a new operating scenario. For each of these changes, the facility shall document the product made and the operating scenario and the corresponding emission estimates and information, as specified in conditions (1), (2), and (3) above. If a new operating scenario results in a new worst-case scenario with a possible emission increase for VOC, Single HAP, and/or Total HAP, the facility shall perform emissions testing for that pollutant within 90 days of the change or request a determination from the IDNR. The facility shall also document these actions upon completion.

E. For each product produced in the DF-11 plant, the owner or operator shall identify and document each VOC and HAP containing material used or produced.

F. The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials used or produced in the DF-11 plant.

G. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 14-076) the owner or operator shall document and maintain a record of:

1. A description of the project (Project Number 14-076),

2. Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 14-076), and

3. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "projected actual emissions" in
subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.

H. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall:
   (1) Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in Condition 5.H.(2).
   (2) Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
   (3) Per 567 IAC 33.3(18)"f"(4) and 567 IAC 33.3(18)"f"(5), the owner or operator shall maintain these records for a period of ten (10) years after the project (Project Number 14-076) is completed.

I. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 22.107(6).

Control Equipment Requirements

J. All process and control equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (2) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the control and process equipment for this process.

K. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

L. The differential pressure drop across the Final Baghouse (CE 5046) shall be maintained between 1.0 and 7.0 inches water column except during periods of filter replacement.
   (1) The owner or operator shall collect and record the pressure drop across Final Baghouse (5046), in inches of water, on a continuous basis. If the pressure drop across the Final Baghouse (5046) falls outside the range specified above, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall also collect and record the pressure drop across all other baghouses associated with this permit, in inches of water, on a daily basis. If the pressure drop across any of these baghouses falls outside the range specified by the manufacturer, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the process is not in operation.

NSPS and NESHAP Requirements

M. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.
N. All batch process vents associated with DF-11 shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

1. The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with DF-11, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

2. As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (DF-11) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

3. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

4. As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525s (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
   i. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
   ii. A record of whether each batch operated was considered a standard batch.
   iii. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
   iv. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

O. Any continuous process vents associated with DF-11 shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

1. The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with DF-11, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

2. As specified in § 63.2455 (b), for each continuous process vent DF-11, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).

3. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide a report as specified in paragraph § 63.2520 (e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

P. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1
requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

Q. The facility shall analyze any changes in formulations and determine if there is a change in applicability for any NSPS or NESHAP subparts for DF-11.
   (1) The facility shall document the results of any NSPS or NESHAP determinations as required above.

Authority for Requirement: DNR Construction Permit 14-A-555-S3

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 14-A-555-S3
40 CFR 63 Subpart FFFF
567 IAC 23.1(4) "cf"

**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 96.5
Stack Opening, (inches, dia.): 34
Exhaust Flow Rate (scfm): 17,000
Exhaust Temperature (°F): 80-100
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 14-A-555-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☑
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☑
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☑

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: DF-2

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drum Weigh Station (EU 14005)</td>
<td>Dryer Baghouse (CE 14440)</td>
<td>2,100 lb/hr</td>
</tr>
<tr>
<td>Drum Inverter (EU 14030)</td>
<td>None(2)</td>
<td>2,100 lb/hr</td>
</tr>
<tr>
<td>Batch Bulk Bag Unloader (EU 14032)</td>
<td>Nuisance Baghouse (CE 14220)</td>
<td>5,000 lb/hr</td>
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<tr>
<td>Batching Station (EU 14000)</td>
<td>Dryer Baghouse (CE 14440)</td>
<td>2,100 lb/hr</td>
</tr>
<tr>
<td>Batching Auger (EU 2253)</td>
<td>NA(1)</td>
<td>2,100 lb/hr</td>
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<td>Pneumatic Conveyance (EU 14015)</td>
<td>Baghouse (CE 14050)</td>
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<td>Blender #1 (EU 14060)</td>
<td>Baghouse (CE 14050)</td>
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<td>Hammer Mill (EU 14080)</td>
<td>Baghouse (CE 14050)</td>
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<td>Blender #2 (EU 14090)</td>
<td>Baghouse (CE 14050)</td>
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<tr>
<td>Mill Feed Auger (EU 14110)</td>
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<td>Air Mill (EU 14008)</td>
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<td>ACM (EU 14120)</td>
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<td>Pneumatic Conveyance (EU 14125)</td>
<td>Baghouse (CE 14150/14160)</td>
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<td>Blender #3 (EU 14170)</td>
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<td>Rotary Sifter (EU 14290)</td>
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<td>BDF Baghouse (CE 14250)</td>
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<td>BDF (EU 14300)</td>
<td>BDF Baghouse (CE 14250)</td>
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<td>Kneader Auger(EU 14320)</td>
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<td>Kneader (EU 14331)</td>
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<td>Extruder (EU 14332)</td>
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<td>Dryer (EU 14350)</td>
<td>Dryer Baghouse (CE 14440)</td>
<td>2,100 lb/hr</td>
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<td>Dryer Auger (EU 14355)</td>
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<td>Vibratory Screener (EU 14370)</td>
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<td>Dryer Baghouse (CE 14440)</td>
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<td>Auger (EU 14475)</td>
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<tr>
<td>HVFS (EU 14 HVFS)</td>
<td>Baghouse (CE 14190)</td>
<td>NA</td>
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</table>

Raw Material/Fuel: Herbicide Ingredients

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.35 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 86-A-116-S4

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 6.85 lbs/hr
Authority for Requirement: DNR Construction Permit 86-A-116-S4

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**
A. The facility shall use steam to heat the Dryer (EU 14350).
B. The average hourly production rate of this plant (DF#2) shall not exceed 1,800 pounds per hour (lbs/hr) calculated on a daily basis.
   1. The facility shall calculate and record the average hourly production rate (lbs/hr) of this plant (DF#2):
      a. The facility shall record the amount of product produced by DF#2, in pounds, on a daily basis;
      b. The facility shall record the hours of operation for DF#2, on a daily basis. The hours of operation for the process is defined as the amount of time that the Final Baghouse (CE 14410) operates;
      c. The facility shall calculate and record on a daily basis the average hourly production rate (lbs/hr) for DF#2 based on the daily amount of product produced and daily hours of operation.
C. As specified in Section 2, testing shall be conducted under worst case conditions that are expected to result in the highest VOC emission rate. If process changes are made that result in a new worst case condition that could reasonably be expected to increase VOC emissions, the facility shall perform emissions testing within 90 days of the change or request a determination from the IDNR.
   1. The facility shall document all operating scenarios and worst case conditions.
(2) The facility shall estimate total VOC emissions for all operating scenarios. The estimates shall be performed using the emission estimation methods specified in conditions J(2) and K(2) of this section or other IDNR approved methods.

(3) The facility shall document the date of any process changes made after emissions testing is completed. For each of these changes, the facility shall document the operating scenario and the corresponding emission estimates. If a new operating scenario results in a new worst case scenario with a possible emission increase, the facility shall perform emissions testing within 90 days of the change or request a determination from the IDNR. The facility shall also document these actions upon completion.

D. For each product produced in the DF#2 plant, the owner or operator shall identify and document each VOC and HAP containing material used or produced.

E. The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials used or produced in the DF#2 plant.

Control Equipment Requirements

F. All process and control equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.

   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the control and process equipment for this process.

G. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

H. The differential pressure drop across the Final Baghouse (CE 14410) shall be maintained between 1.0 and 7.0 inches water column except during periods of filter replacement.

   (1) The owner or operator shall collect and record the pressure drop across the Final Baghouse (CE 14410) for DF#2, in inches of water, on a daily basis. This requirement shall not apply on the days that the baghouse is not in operation. If the pressure drop across the baghouse falls outside the range specified above, the owner or operator shall investigate the baghouse and make the necessary corrections. The permittee shall maintain a record any corrective action taken for which data show a deviation from the specified pressure drop range above, including the date and time of the deviations, the date and time corrective action was initiated and completed, and the corrective action taken.

NSPS or NESHAP Requirements

I. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing—Subpart FFFF.

   a. The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

J. All batch process vents associated with DF#2 shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
(1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with DF#2, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (DF#2) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

(3) As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

(4) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525s (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
   i. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
   ii. A record of whether each batch operated was considered a standard batch.
   iii. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
   iv. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

K. Any continuous process vents associated with DF#2 shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

   (1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with DF#2, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

   (2) As specified in § 63.2455 (b), for each continuous process vent DF#2, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).

   (3) As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide a report as specified in paragraph § 63.2520 (e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

L. The facility shall analyze any changes in formulations and determine if there is a change in applicability for any NSPS or NESHAP subparts for DF#2.

   (1) The facility shall document the results of any NSPS or NESHAP determinations as required above.
Authority for Requirement: DNR Construction Permit 86-A-116-S4

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 86-A-116-S4
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)“cf”

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 60
Stack Opening, (inches, dia.): 35 x 35
Exhaust Flow Rate (scfm): 16,700
Exhaust Temperature (°F): 120
Discharge Style: Downward
Authority for Requirement: DNR Construction Permit 86-A-116-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?  Yes ☐  No ☑
Facility Maintained Operation & Maintenance Plan Required?  Yes ☑  No ☐
Compliance Assurance Monitoring (CAM) Plan Required?  Yes ☑  No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement:  567 IAC 22.108(3)
**Emission Point ID Number: DF-3**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batching Station (1000)</td>
<td>Dump Station Bin Vent Baghouse (1057)</td>
<td>2,000 lb/hr</td>
</tr>
<tr>
<td>Blender 1 (1002)</td>
<td>Blender 1 Baghouse (1001)</td>
<td>2,000 lb/hr</td>
</tr>
<tr>
<td>Hammermill (1004)</td>
<td>Blender 1 Baghouse (1001)</td>
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<tr>
<td>Blender 2 (1005)</td>
<td>Blender 1 Baghouse (1001)</td>
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<tr>
<td>ACM Mill (1008)</td>
<td>NA(1)</td>
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<tr>
<td>Blender 3 (1012)</td>
<td>Blender 3 Baghouse (1011)</td>
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<td>Hopper (1014)</td>
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<td>Blender 4 (1015)</td>
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<td>Rotary Sifter (1021)</td>
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<td>BDF (1022)</td>
<td>BDF Baghouse (1017)</td>
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<tr>
<td>Feeder Pan (1023)</td>
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<td>Granulation Pan (1024)</td>
<td>BDF Baghouse (1017)</td>
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<td>Fluidized-Bed Dryer-Steam Heated (1025)</td>
<td>Dryer Baghouse (1033)</td>
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<td>Bucket Elevator (1026)</td>
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<td>Sweco Screen (1027)</td>
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<td>Finished Product Hopper(1030)</td>
<td>Nuisance Baghouse (1042)</td>
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<tr>
<td>Packing Area (1031)</td>
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<td>House Keeping Vacuum System(1044)</td>
<td>Vacuum Baghouse (1044)</td>
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<td>Bulk Bag Unloader-1(1046)</td>
<td>Bulk Unloader Bin Vent Baghouse 1 (1052)</td>
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<td>Bulk Bag Unloader-2(1047)</td>
<td>Bulk Unloader Bin Vent Baghouse 2 (1053)</td>
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<td>Lump Breaker(1048)</td>
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<tr>
<td>Drum Dump Station(1061)</td>
<td>Dump Station Bin Vent Baghouse (1057)</td>
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<td>Kneader(1062)</td>
<td>Nuisance Baghouse (1042)</td>
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<tr>
<td>Extruder(1063)</td>
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</tr>
<tr>
<td>Air Mill(1064)</td>
<td>NA(1)</td>
<td>2,000 lb/hr</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide Ingredients
Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

**Pollutant: Opacity**
**Emission Limit(s):** 40% (1)
**Authority for Requirement:** 567 IAC 23.3(2)"d"
DNR Construction Permit 86-A-117-S7

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

**Pollutant: Particulate Matter (PM)**
**Emission Limit(s):** 0.74 lb/hr, 0.1 gr/dscf
**Authority for Requirement:** 567 IAC 23.3(2)"a"
DNR Construction Permit 86-A-117-S7

**Pollutant: Volatile Organic Compounds (VOC)**
**Emission Limit(s):** 8.00 lbs/hr
**Authority for Requirement:** DNR Construction Permit 86-A-117-S7

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. The facility shall use steam to heat the Dryer (1025).

B. The average hourly production rate of this plant (DF-3) shall not exceed 1,800 pounds per hour (lbs/hr) calculated on a daily basis.
   (1) The facility shall calculate and record the average hourly production rate (lbs/hr) of this plant (DF-3):
      (a) The facility shall record the amount of product produced by DF-3, in pounds, on a daily basis;
      (b) The facility shall record the hours of operation for DF-3, on a daily basis. The hours of operation for the process is defined as the amount of time that the Final Baghouse (1035) operates;
(c) The facility shall calculate and record on a daily basis the average hourly production rate (lbs/hr) for DF-3 based on the daily amount of product produced and daily hours of operation.

C. As specified in Condition 2, testing for DF-3 plant shall be conducted under worst case conditions that are expected to result in the highest VOC emission rate. If process changes are made that result in a new worst-case condition that could reasonably be expected to increase VOC emissions, the facility shall perform emissions testing within 90 days of the change or request a determination from the IDNR.

1) The facility shall document all products made and the corresponding operating scenarios.

2) The facility shall estimate total VOC emissions for all operating scenarios. The estimates shall be performed using test data and the emission estimation methods specified in conditions J(2) and K(2) of this section or other Iowa DNR approved methods. The facility shall document all information need to perform the calculation, including, but not limited to: calculation methods, emission episodes, materials used, process temperatures, and process pressures.

3) The facility shall document the worst case condition for VOC emissions. This will include the product made, the corresponding operating scenario, and the VOC emissions rate.

4) The facility shall document the date of the tests performed for each worst case condition for VOC and the results of those tests.

5) The facility shall document the date of any process changes that result in a new worst case scenario. For each of these changes, the facility shall document the product made and the operating scenario and the corresponding emission estimates and information, as specified above. If a new operating scenario results in a new worst case scenario with a possible emission increase for VOC, the facility shall perform emissions testing for that pollutant within 90 days of the change or request a determination from the Iowa DNR. The facility shall also document these actions upon completion.

D. For each product produced in the DF-3 plant, the owner or operator shall identify and document each VOC and HAP containing material used or produced.

E. The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials used or produced in the DF-3 plant.

Control Equipment Requirements

F. All process and control equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.

   1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the control and process equipment for this process.

G. The owner or operator shall operate the control equipment at all times when emissions are vented to them.
H. The differential pressure drop across the Final Baghouse (CE 1035) shall be maintained between 1.0 and 7.0 inches water column except during periods of filter replacement.

(1) The owner or operator shall collect and record the pressure drop across the Final Baghouse (CE 1035) for DF-3, in inches of water, on a daily basis. This requirement shall not apply on the days that the baghouse is not in operation. If the pressure drop across the baghouse falls outside the range specified above, the owner or operator shall investigate the baghouse and make the necessary corrections. The permittee shall maintain a record any corrective action taken for which data show a deviation from the specified pressure drop range above, including the date and time of the deviations, the date and time corrective action was initiated and completed, and the corrective action taken.

NSPS or NESHAP Requirements
I. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   a. The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

J. All batch process vents associated with DF-3 shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with DF-3, according to 40 CFR Part 63 Subpart FFFF, 63.2550.
   (2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (DF-3) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).
   (3) As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.
   (4) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525s (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
      i. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
      ii. A record of whether each batch operated was considered a standard batch.
iii. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

iv. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

K. Any continuous process vents associated with DF-3 shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with DF-3, according to 40 CFR Part 63 Subpart FFFF, 63.2550.
   (2) As specified in § 63.2455 (b), for each continuous process vent DF-3, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs §63.2455 (b)(1) through (3).
   (3) As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide a report as specified in paragraph § 63.2520 (e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

L. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

M. Any wastewater streams that are part of the miscellaneous organic chemical process unit for DF-3 shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, §63.2485 and the requirements referenced therein.
   (1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

N. The facility shall analyze any changes in formulations and determine if there is a change in applicability for any NSPS or NESHAP subparts for DF-3.
   (1) The facility shall document the results of any NSPS or NESHAP determinations as required above.

Authority for Requirement: DNR Construction Permit 86-A-117-S7
**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 86-A-117-S7
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): 61
- Stack Opening, (inches, dia.): 27
- Exhaust Flow Rate (scfm): 15,000
- Exhaust Temperature (°F): 110
- Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 86-A-117-S7

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Approved Operation &amp; Maintenance Plan?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)
## Emission Point ID Number: DF#4

### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drum Weigh Station (EU DF4 2268)</td>
<td>Nuisance Baghouse 8 (CE DF4 2239)</td>
<td>2,250 lb/hr</td>
</tr>
<tr>
<td>Drum Dumper (EU DF4 2252)</td>
<td>None(3)</td>
<td>2,000 lb/hr</td>
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<tr>
<td>Batching Station (EU DF4 2201)</td>
<td>Nuisance Baghouse 8 (CE DF4 2239)</td>
<td>3,000 lb/hr</td>
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<tr>
<td>Feeder (EU DF4 2269)</td>
<td>NA(1)</td>
<td>2,000 lb/hr</td>
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<tr>
<td>Batching Bucket Elevator (EU DF4 2202)</td>
<td>NA(1)</td>
<td>2,250 lb/hr</td>
</tr>
<tr>
<td>Pneumatic Conveyance to Blender #1 (EU DF4 2270)</td>
<td>Baghouse 1 (CE DF4 2204)</td>
<td>2,250 lb/hr</td>
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<tr>
<td>Blender #1 (EU DF4 2205)</td>
<td>Baghouse 1 (CE DF4 2204)</td>
<td>2,250 lb/hr</td>
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<tr>
<td>Hammer Mill (EU DF4 2207)</td>
<td>Baghouse 1 (CE DF4 2204)</td>
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<td>Blender #2 (EU DF4 2208)</td>
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<td>Blender 3 (EU DF4 2213)</td>
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<td>Nuisance Baghouse 7 (CE DF4 2238)</td>
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<tr>
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<td>BDF (EU DF4 2224)</td>
<td>BDF Baghouse (CE DF4 2219)</td>
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<td>Surge Hopper (EU DF4 2232)</td>
<td>Sock Filter (CE DF4 2220)(2)</td>
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<td>Feeder (EU DF4 2227)</td>
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<td>Vibratory Fluid Bed Dryer (EU DF4 2229)</td>
<td>Dryer Baghouse 1 (CE DF4 2230)</td>
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<td>Vibratory Fluid Bed Dryer (EU DF4 2231)</td>
<td>Dryer Baghouse 2 (CE DF4 2232)</td>
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<td>Finish Product Hopper (EU DF4 2235)</td>
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<td>Packing Equipment (EU DF4 2236)</td>
<td>Nuisance Baghouse 8 (CE DF4 2239)</td>
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<td>Lump Buster (EU DF4 2240)</td>
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<td>Recycle Hopper (EU DF4 2241)</td>
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<td>Auger (EU DF4 2242)</td>
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<td>Dryer Baghouse (CE DF4 2230)</td>
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<td>3,000 lb/hr</td>
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<tr>
<td>Auger (EU DF4 2254)</td>
<td>NA(1)</td>
<td>2,250 lb/hr</td>
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<tr>
<td>Pneumatic Conveyance to Conical Screw Mixer (EU DF4 2273)</td>
<td>Conical Screw Mixer Baghouse (CE DF4 2267)</td>
<td>1,000 lb/hr</td>
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<tr>
<td>Conical Screw Mixer (EU DF4 2266)</td>
<td>Conical Screw Mixer Baghouse (CE DF4 2267)</td>
<td>1,000 lb/hr</td>
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<td>Collection Drum - Conical Screw Mixer (EU DF4 2274)</td>
<td>None(3)</td>
<td>1,000 lb/hr</td>
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<tr>
<td>Housekeeping Vacuum System (EU DF4 22HVFS)</td>
<td>Vacuum System Baghouse (CE DF4 2243)</td>
<td>1,000 lb/hr</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide Ingredients
Applicable Requirements

Emission Limits (lb/hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 87-A-110-S2

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 2.73 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 87-A-110-S2

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 7.99 lbs/hr
Authority for Requirement: DNR Construction Permit 87-A-110-S2

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The owner or operator shall only use steam in the Vibratory Fluid Bed Dryer (EU DF4 2229) and Vibratory Fluid Bed Dryer (EU DF4 2231).
B. The average hourly production rate of this plant (DF#4) shall not exceed 2,000 pounds per hour (lb/hr). On a daily basis, the owner or operator shall:
   a. Record the amount of product produced by DF#4, in pounds;
   b. Record the hours of operation for DF#4. The hours of operation for the process shall be defined as the amount of time that the Final Baghouse (CE DF4 2246) operates; and
   c. Calculate and record the average hourly production rate (lb/hr) for DF#4 based on the amount of product produced and the hours of operation.
C. For each product produced in the DF#4 plant, the owner or operator shall identify and document each VOC and HAP containing material used or produced. The owner or operator shall maintain a copy of the Safety Data Sheet (SDS) for all materials used or produced in the DF#4 plant.
D. As specified in Condition 2, VOC testing shall be conducted under worst case conditions that are expected to result in the highest VOC emission rates. If process changes are made that result in a new worst case condition that could reasonably be expected to increase VOC emissions, the facility shall perform emissions testing within 90 days of the change or request a determination from the IDNR.
   a. The facility shall document all products made and the corresponding operating scenarios.
   b. For each operating scenario, the facility shall calculate the VOC emissions, based on the methods used in the application for project 14-184 or other IDNR approved methods. The facility shall document all information need to perform the calculation, including, but not limited to: calculation methods, emission episodes, materials used, process temperatures, and process pressures.
   c. The facility shall document the worst case condition for VOC emissions. This will include the product made, the corresponding operating scenario, and the VOC emissions rates.
   d. The facility shall document the date of the tests performed for each worst case condition for VOC and the results of those tests.
   e. The facility shall document the date of any process changes that result in a new operating scenario. For each of these changes, the facility shall document the product made and the operating scenario and the corresponding emission estimates and information, as specified in Condition 5.DE(a) and (b) above. If a new operating scenario results in a new worst case scenario with a possible emission increase for VOC, the facility shall perform emissions testing for that pollutant within 90 days of the change or request a determination from the IDNR. The facility shall also document these actions upon completion.

Control Equipment Requirements
E. All process and control equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the control and process equipment for this process.

F. The owner or operator shall operate the control equipment at all times when equipment which vents to the control equipment is operating.

G. The differential pressure drop across the Final Baghouse (CE DF4 2246) shall be maintained between 1.0 and 7.0 inches water column except during periods of filter replacement.
   (1) The owner or operator shall record the pressure drop across the Final Baghouse (CE DF4 2246), in inches of water column, on a daily basis. If the pressure drop across the Final Baghouse (CE DF4 2246) falls outside the range of 1.0 and 7.0 inches water column, the owner or operator shall investigate the baghouse and make necessary corrections. The owner or operator shall also collect and record the pressure drop across all other baghouses associated with the DF#4 plant, in inches
water column, on a daily basis. If the pressure drop across any of these baghouses falls outside the range specified by the manufacturer, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall maintain a record of all corrective actions taken on any of the baghouses associated with the DF#4 plant. This requirement shall not apply on any days that the process is not in operation.

**NSPS and NESHAP Requirements**

**H.** The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   a. The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

**I.** All batch process vents associated with DF#4 shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, §63.2550.
   a. The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with DF#4, according to 40 CFR Part 63 Subpart FFFF, §63.2550.
   b. As specified in §63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (DF#4) using the procedures specified in §63.1257(d)(2)(i) and (ii), except as specified in paragraphs §63.2460 (b)(1) through (7).
   c. As specified in §63.2445(d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph §63.2460 (b)(6)(i) or (ii). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.
   d. As specified in §63.2525(e)(4), unless one of the conditions specified in paragraphs §63.2525 (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
      i. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
      ii. A record of whether each batch operated was considered a standard batch.
      iii. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
      iv. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

**J.** All continuous process vents associated with DF#4 shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, §63.2550.
a. The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with DF#4, according to 40 CFR Part 63 Subpart FFFF, §63.2550.

b. As specified in §63.2455(b), for each continuous process vent in DF#4, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in §63.115(d), except as specified in paragraphs §63.2455 (b)(1) through (3).

c. As specified in §63.2445(d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide a report as specified in paragraph §63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

K. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

L. The facility shall analyze any changes in formulations and determine if there is a change in applicability for any NSPS or NESHAP subparts for DF#4.

a. The facility shall document the results of any NSPS or NESHAP determinations as required above.

M. Any wastewater streams that are part of the miscellaneous organic chemical process unit for DF#4 shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, §63.2485 and the requirements referenced therein.

a. The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

Authority for Requirement: DNR Construction Permit 86-A-110-S2

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 86-A-110-S2

40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 81  
Stack Opening, (inches, dia.): 35.5 x 47.5  
Exhaust Flow Rate (scfm): 23,500  
Exhaust Temperature (°F): 120  
Discharge Style: Horizontal  
Authority for Requirement: DNR Construction Permit 86-A-110-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

**Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒

**Facility Maintained Operation & Maintenance Plan Required?** Yes ☒ No ☐

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)
### Emission Point ID Number: DF#6

#### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drum Weigh Station (EU 3000)</td>
<td>Nuisance Baghouse (CE 3033)</td>
<td>1,500 lb/hr</td>
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<td>Batchign Station (EU 3001)</td>
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<td>Batching Auger (EU 3002)</td>
<td>Blender #1 Baghouse (CE 3003)</td>
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<td>Blender #1 (EU 3004)</td>
<td>Blender #1 Baghouse (CE 3003)</td>
<td>1,500 lb/hr</td>
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<tr>
<td>Bulk Bag Baching Hopper (EU 3005)</td>
<td>Blender #1 Baghouse (CE 3003)</td>
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<td>Hammer Mill (EU 3006)</td>
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<td>Blender #1 Baghouse (CE 3003)</td>
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<td>Blender #2 (EU 3008)</td>
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<td>Mill Feed Auger (EU 3010)</td>
<td>Nuisance Baghouse (CE 3033)</td>
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<td>Blender #3 (EU 3013)</td>
<td>Blender #3 Baghouse (CE 3012)</td>
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<td>Rotary Sifter (EU 3015)</td>
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<td>Pneumatic Conveyance 3015 to 3055 (EU 3016)</td>
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<td>Pneumatic Conveyance BDF (EU 3017)</td>
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<td>Air Mill (EU 3018)</td>
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<td>BDF Hopper (EU 3040)</td>
<td>Sock Filter&lt;sup&gt;(2)&lt;/sup&gt; (CE 3050)</td>
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<td>Kneader Feed Auger (EU 3024)</td>
<td>Sock Filter&lt;sup&gt;(2)&lt;/sup&gt; (CE 3051) &amp; Dryer Baghouse (CE 3030)</td>
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<td>Kneader (EU 3026)</td>
<td>Nuisance Baghouse (CE 3033)</td>
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<tr>
<td>Extruder (EU 3027)</td>
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<td>Dryer (EU 3028)</td>
<td>Dryer Baghouse (CE 3030)</td>
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<td>Vibratory Screener (EU 3029)</td>
<td>Nuisance Baghouse (CE 3033)</td>
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<td>Packaging Equipment (EU 3031)</td>
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<td>Bulk Packaging Equipment (EU 3032)</td>
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<td>Bucket Elevator (EU 3034)</td>
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<td>Dryer Baghouse Auger (EU 3050)</td>
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<td>Final Baghouse Auger (EU 3051)</td>
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<td>Bag House Cross Auger #1 (EU 3052)</td>
<td>Dryer Baghouse (CE 3030)</td>
<td>1,500 lb/hr</td>
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<td>Bag House Cross Auger #2 (EU 3053)</td>
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<td>Nuisance Baghouse (CE 3033)</td>
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<tr>
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<td>Rework Drum (EU 3056)</td>
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<tr>
<td>HVFS (EU 30HVFS)</td>
<td>HVFS Baghouse (CE 3040)</td>
<td>1,500 lb/hr</td>
</tr>
</tbody>
</table>

### Raw Material/Fuel: Herbicide Ingredients
Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

**Pollutant: Opacity**
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 94-A-486-S6

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

**Pollutant: Particulate Matter (PM)**
Emission Limit(s): 0.86 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 94-A-486-S6

**Pollutant: Volatile Organic Compounds (VOC)**
Emission Limit(s): 6.85 lbs/hr
Authority for Requirement: DNR Construction Permit 94-A-486-S6

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**
A. The facility shall use steam to heat the Dryer (EU 3028).
B. The average hourly production rate of this plant (DF-6) shall not exceed 1,500 pounds per hour (lbs/hr) calculated on a daily basis.
   (1) The facility shall calculate and record the average hourly production rate (lbs/hr) of this plant (DF-6):
      (a) The facility shall record the amount of product produced by DF-6, in pounds, on a daily basis;
      (b) The facility shall record the hours of operation for DF-6, on a daily basis. The hours of operation for the process is defined as the amount of time that the Final Baghouse (CE 3043) operates;
      (c) The facility shall calculate and record on a daily basis the average hourly production rate (lbs/hr) for DF-6 based on the daily amount of product produced and daily hours of operation.
C. As specified in Condition 2, testing for DF-6 plant shall be conducted under worst case conditions that are expected to result in the highest VOC emission rate. If process changes are made that result in a new worst-case condition that could reasonably be expected to increase VOC emissions, the facility shall perform emissions testing within 90 days of the change or request a determination from the IDNR.

1) The facility shall document all products made and the corresponding operating scenarios.
2) The facility shall estimate total VOC emissions for all operating scenarios. The estimates shall be performed using test data and the emission estimation methods specified in conditions J(2) and K(2) of this section or other Iowa DNR approved methods. The facility shall document all information need to perform the calculation, including, but not limited to: calculation methods, emission episodes, materials used, process temperatures, and process pressures.
3) The facility shall document the worst case condition for VOC emissions. This will include the product made, the corresponding operating scenario, and the VOC emissions rate.

The facility shall document the date of the tests performed for each worst-case condition for VOC and the results of those tests.

4) The facility shall document the date of any process changes that result in a new operating scenario. For each of these changes, the facility shall document the product made and the operating scenario and the corresponding emission estimates and information, as specified above. If a new operating scenario results in a new worst case scenario with a possible emission increase for VOC, the facility shall perform emissions testing for that pollutant within 90 days of the change or request a determination from the Iowa DNR. The facility shall also document these actions upon completion.

D. For each product produced in the DF-6 plant, the owner or operator shall identify and document each VOC and HAP containing material used.

E. The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials used or produced in the DF-6 plant.

Control Equipment Requirements

F. All process and control equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.

(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the control and process equipment for this process.

G. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

H. The differential pressure drop across the Final Baghouse (CE 3043) shall be maintained between 0.40 and 7.0 inches water column except during periods of filter replacement.

(1) The owner or operator shall collect and record the pressure drop across the Final Baghouse (CE 3043) for DF-6, in inches of water, on a daily basis. This requirement shall not apply on the days that the baghouse is not in operation. If the pressure drop across any of the baghouses falls outside the range specified above, the owner or operator shall investigate the baghouse and make the necessary corrections. The
The permittee shall maintain a record any corrective action taken for which data show a deviation from the specified pressure drop range above, including the date and time of the deviations, the date and time corrective action was initiated and completed, and the corrective action taken.

(2) The owner or operator shall maintain onsite a copy of the most recent compliance test report which showed compliance with all applicable emission limitations. This report shall include, but not be limited to, the emission rates observed during the testing and the average pressure drop across the Final Baghouse (CE 3043) during the testing.

NSPS and NESHAP Requirements

I. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF. The process is not considered a miscellaneous organic chemical manufacturing process unit (MCPU) if it does not process, use, or generate any of the organic HAP listed in section 112(b) of the CAA or hydrogen halide and halogen HAP, as defined in § 63.2550.

   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

J. All batch process vents associated with DF-6 shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

   (1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with DF#6, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

   (2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (DF#6) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7). 

   (3) As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

   (4) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525s (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:

      i. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.

      ii. A record of whether each batch operated was considered a standard batch.

      iii. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
iv. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

K. Any continuous process vents associated with DF-6 shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with DF#6, according to 40 CFR Part 63 Subpart FFFF, 63.2550.
   (2) As specified in § 63.2455 (b), for each continuous process vent DF#6, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).
   (3) As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide a report as specified in paragraph § 63.2520 (e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

L. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

M. Any wastewater streams that are part of the miscellaneous organic chemical process unit for DF-6 shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, §63.2485 and the requirements referenced therein.
   (1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

N. The facility shall analyze any changes in formulations and determine if there is a change in applicability for any NSPS or NESHAP subparts for DF-6.
   (1) The facility shall document the results of any NSPS or NESHAP determinations as required above.

Authority for Requirement:  DNR Construction Permit 94-A-486-S6
**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:  
DNR Construction Permit 94-A-486-S6  
40 CFR 63 Subpart FFFF  
567 IAC 23.1(4)"cf"

**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 70  
Stack Opening, (inches, dia.): 26  
Exhaust Flow Rate (scfm): 10,070  
Exhaust Temperature (°F): 120  
Discharge Style: Vertical Obstructed  
Authority for Requirement: DNR Construction Permit 94-A-486-S6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?** Yes ☒ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?** Yes ☒ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☒ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)
### Emission Point ID Number: DF#7

#### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drum Weigh Station (EU 3302)</td>
<td>Nuisance Baghouse (CE 3333)</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>Drum Dumper (EU 3354)</td>
<td>None(^{(3)})</td>
<td>1,000 lb/hr</td>
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<tr>
<td>Batching Hopper (EU 3301)</td>
<td>Nuisance Baghouse (CE 3333)</td>
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<tr>
<td>Lump Breaker (EU 3352)</td>
<td>NA(^{(1)})</td>
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<td>Pneumatic Conveyance (EU 3340)</td>
<td>Blender #1 Baghouse (CE 3303)</td>
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<td>Blender #1 (EU 3304)</td>
<td>Blender #1 Baghouse (CE 3303)</td>
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<td>Hammer Mill (EU 3305)</td>
<td>Blender #1 Baghouse (CE 3303)</td>
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<td>Blender #2 (EU 3306)</td>
<td>Blender #1 Baghouse (CE 3303)</td>
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<tr>
<td>Mill Feed Auger (EU 3341)</td>
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<tr>
<td>Air Mill (EU 3308)</td>
<td>Nuisance Baghouse (CE 3333)</td>
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<td>Pneumatic Conveyance (EU 3342)</td>
<td>Blender #3 Baghouse (CE 3309)</td>
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<td>Blender #3 (EU 3310)</td>
<td>Blender #3 Baghouse (CE 3309)</td>
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<td>BDF Baghouse (CE 3350)</td>
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<td>BDF Baghouse (CE 3350)</td>
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<td>Kneader Feed Auger (EU 3347)</td>
<td>Sock Filter (CE 3353)(^{(2)})</td>
<td>1,000 lb/hr</td>
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<td>Liquid Batching Tank (EU 3351)</td>
<td>Sock Filter (CE 3354)(^{(2)})</td>
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<td>Liquid Loss on Weight Storage Tank (EU 3362)</td>
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<td>Liquid Loss in Weight System (EU 3353)</td>
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<td>Dryer (EU 3318)</td>
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<td>Bucket Elevator (EU 3319)</td>
<td>Nuisance Baghouse (CE 3333)</td>
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<td>Packaging Hopper (EU 3321)</td>
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<td>Bulk Packaging (EU 3322)</td>
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<td>Packaging Equipment (EU 3361)</td>
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<td>Sock Filter (CE 3355)(^{(2)})</td>
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<td>None(^{(3)})</td>
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<td>Pneumatic Conveyance (EU 3348)</td>
<td>Nuisance Baghouse (CE 3333)</td>
<td>2,000 lb/hr</td>
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<td>Recycle Hopper (EU 3350)</td>
<td>Nuisance Baghouse (CE 3333)</td>
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<td>Recycle Hopper Auger (EU 3345)</td>
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<td>HVFS (EU 33 HVFS)</td>
<td>HVFS Baghouse (CE 3334)</td>
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<tr>
<td>Pluronic Slurry Tank (EU 3363)</td>
<td>None(^{(3)})</td>
<td>100 gal</td>
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</tbody>
</table>

**Raw Material/Fuel:** Herbicide Ingredients
Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"

DNR Construction Permit 98-A-644-S6

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.03 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"

DNR Construction Permit 98-A-644-S6

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 6.85 lbs/hr
Authority for Requirement: DNR Construction Permit 98-A-644-S6

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**
A. The facility shall only use steam to heat the Dryer (EU 3318).

B. The average hourly production rate of this plant (DF#7) shall not exceed 1,000 pounds per hour (lbs/hr) calculated on a daily basis. The facility shall calculate and record the average hourly production rate (lbs/hr) of this plant (DF#7), using the following:
   (1) The facility shall record the amount of product produced by DF#7, in pounds, on a daily basis;
   (2) The facility shall record the hours of operation for DF#7, on a daily basis. The hours of operation for the process is defined as the amount of time that the Final Baghouse (CE 3329) operates; and,
   (3) The facility shall calculate and record on a daily basis the average hourly production rate (lbs/hr) for DF#7 based on the daily amount of product produced and daily hours of operation.
C. Testing shall be conducted under worst case conditions that are expected to result in the highest VOC emission rate. If process changes are made that result in a new worst-case condition that could reasonably be expected to increase VOC emissions, the facility shall perform emissions testing within 90 days of the change or request a determination from the IDNR.

(1) The facility shall document all operating scenarios and worst-case conditions.
(2) The facility shall estimate total VOC emissions for all operating scenarios. The estimates shall be performed using the emission estimation methods specified in conditions J(2) and K(2) of this Condition or other IDNR approved methods.
(3) The facility shall document the date of any process changes made after initial emissions testing is completed. For each of these changes, the facility shall document the operating scenario and the corresponding emission estimates. If a new operating scenario results in a new worst-case scenario with a possible emission increase, the facility shall perform emissions testing within 90 days of the change or request a determination from the IDNR. The facility shall also document these actions upon completion.

D. For each product produced in the DF#7 plant, the owner or operator shall identify and document each VOC and HAP containing material used or produced.

E. The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials used or produced in the DF#7 plant.

Control Equipment Requirements

F. All process and control equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.

(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the control and process equipment for this process.

G. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

H. The differential pressure drop across the Final Baghouse (CE 3329) shall be maintained between 0.40 and 7.0 inches water column except during periods of filter replacement.

(1) The owner or operator shall collect and record the pressure drop across the Final Baghouse (CE 3329) for DF-7, in inches of water, on a daily basis. This requirement shall not apply on the days that the baghouse is not in operation. If the pressure drop across any of the baghouses falls outside the range specified above, the owner or operator shall investigate the baghouse and make the necessary corrections. The permittee shall maintain a record any corrective action taken for which data show a deviation from the specified pressure drop range above, including the date and time of the deviations, the date and time corrective action was initiated and completed, and the corrective action taken.
(2) The owner or operator shall maintain onsite a copy of the most recent compliance test report that showed compliance with all applicable emission limitations. This report shall include, but not be limited to, the emission rates observed during the testing and the average pressure drop across the Final Baghouse (CE 3329) during the testing.

**NSPS and NESHAP Requirements**

I. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing-Subpart FFFF. The process is not considered a miscellaneous organic chemical manufacturing process unit (MCPU) if it does not process, use, or generate any of the organic HAP listed in section 112(b) of the CAA or hydrogen halide and halogen HAP, as defined in § 63.2550.

   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

J. All batch process vents associated with DF#7 shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

   (1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with DF#7, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

   (2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (DF#7) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

   (3) As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

   (4) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525 (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:

      a) A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.

      b) A record of whether each batch operated was considered a standard batch.

      c) The estimated uncontrolled and controlled emissions for each batch that is considered a nonstandard batch.

      d) Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.
K. Any continuous process vents associated with DF#7 shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
   (1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with DF#7, according to 40 CFR Part 63 Subpart FFFF, 63.2550.
   (2) As specified in § 63.2455 (b), for each continuous process vent DF#7, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).
   (3) As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide a report as specified in paragraph § 63.2520 (e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

L. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

M. The facility shall analyze any changes in formulations and determine if there is a change in applicability for any NSPS or NESHAP subparts for DF#7.
   (1) The facility shall document the results of any NSPS or NESHAP determinations as required above.

Authority for Requirement: DNR Construction Permit 98-A-644-S6

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 98-A-644-S6
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 75  
Stack Opening, (inches, dia.): 26  
Exhaust Flow Rate (scfm): 12,000  
Exhaust Temperature (°F): 120  
Discharge Style: Vertical Obstructed  
Authority for Requirement: DNR Construction Permit 98-A-644-S6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☑
- **Facility Maintained Operation & Maintenance Plan Required?** Yes ☑ No ☐
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☑ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)
# Emission Point ID Number: DF#8

## Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drum Weighing Station (EU DF8 3440)</td>
<td>Nuisance Baghouse (CE DF8 3428)</td>
<td>2,250 lb/hr</td>
</tr>
<tr>
<td>Drum Dumper (EU DF8 3441)</td>
<td>None(1)</td>
<td>2,250 lb/hr</td>
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<tr>
<td>Batching Station (EU DF8 3401)</td>
<td>Nuisance Baghouse (CE DF8 3428)</td>
<td>2,250 lb/hr</td>
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<td>Bulk Bag Unloader (EU DF8 3402)</td>
<td>Nuisance Baghouse (CE DF8 3428)</td>
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<td>Lump Breaker (EU DF8 3405)</td>
<td>NA(1)</td>
<td>2,250 lb/hr</td>
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<td>Blender #1 (EU DF8 3403)</td>
<td>Nuisance Baghouse (CE DF8 3428)</td>
<td>2,250 lb/hr</td>
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<td>Hammer Mill (EU DF8 3406)</td>
<td>Nuisance Baghouse (CE DF8 3428)</td>
<td>3,000 lb/hr</td>
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<td>Blender #2 (EU DF8 3407)</td>
<td>Nuisance Baghouse (CE DF8 3428)</td>
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<tr>
<td>Pneumatic Conveyance to Blender #3/Cyclone Separator (EU DF8 3442)</td>
<td>Cyclone Separator (CE DF8 3438)/Baghouse #2 (CE DF8 3412)</td>
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<td>Feeder (EU DF8 3408)</td>
<td>Cyclone Separator (CE DF8 3438)/Baghouse #2 (CE DF8 3412)</td>
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<td>Rotary Sifter (EU DF8 3414)</td>
<td>NA(1)</td>
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<td>Kneader Feeder (EU DF8 3417)</td>
<td>Sock Filter (CE 3355)(2)</td>
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<td>Kneader (EU DF8 3418)</td>
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<td>Extruder (EU DF8 3419)</td>
<td>None(2)</td>
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<td>Long Cross Auger (EU DF8 3420a)</td>
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<td>Short Cross Auger (EU DF8 3420b)</td>
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<td>Vibratory Fluid Bed Dryer (EU DF8 3421)</td>
<td>Dryer Baghouse (CE DF8 3433)</td>
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<td>Aspirator Sifter (EU DF8 3434)</td>
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<td>Final Product Hopper (EU DF8 3436)</td>
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<td>BDF Hopper (EU DF8 3437)</td>
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<td>Housekeeping Vacuum System (EU DF8 34HVFS)</td>
<td>Vacuum System Baghouse (CE DF8 3427)</td>
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<td>Basket Granulator (EU DF8 3422)</td>
<td>Nuisance Baghouse (CE DF8 3428)</td>
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</table>

Raw Material/Fuel: Herbicide Ingredients
Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity  
Emission Limit(s): 40% (1)  
Authority for Requirement: 567 IAC 23.3(2)"d"  
DNR Construction Permit 99-A-409-S3

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)  
Emission Limit(s): 1.29 lb/hr, 0.1 gr/dscf  
Authority for Requirement: 567 IAC 23.3(2)"a"  
DNR Construction Permit 99-A-409-S3

Pollutant: Volatile Organic Compounds (VOC)  
Emission Limit(s): 7.99 lbs/hr  
Authority for Requirement: DNR Construction Permit 99-A-409-S3

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The owner or operator shall only combust natural gas or propane in the Vibratory Fluid Bed Dryer (EU DF8 3421).
B. The average hourly production rate of this plant (DF#8) shall not exceed 2,250 pounds per hour (lb/hr). On a daily basis, the owner or operator shall:
   a. Record the amount of product produced by DF#8, in pounds;  
   b. Record the hours of operation for DF#8. The hours of operation for the process shall be defined as the amount of time that the Final Baghouse (CE DF8 3430) operates; and  
   c. Calculate and record the average hourly production rate (lb/hr) for DF#8 based on the amount of product produced and the hours of operation.
C. For each product produced in the DF#8 plant, the owner or operator shall identify and document each VOC and HAP containing material used or produced. The owner or operator shall maintain a copy of the Safety Data Sheet (SDS) for all materials used or produced in the DF#8 plant.
D. As specified in Condition 2, VOC testing shall be conducted under worst case conditions that are expected to result in the highest VOC emission rates. If process changes are made that result in a new worst case condition that could reasonably be expected to increase VOC emissions, the facility shall perform emissions testing within 90 days of the change or request a determination from the IDNR.
   a. The facility shall document all products made and the corresponding operating scenarios.
   b. For each operating scenario, the facility shall calculate the VOC emissions, based on the methods used in the application for project 14-184 or other IDNR approved methods. The facility shall document all information need to perform the calculation, including, but not limited to: calculation methods, emission episodes, materials used, process temperatures, and process pressures.
   c. The facility shall document the worst case condition for VOC emissions. This will include the product made, the corresponding operating scenario, and the VOC emissions rates.
   d. The facility shall document the date of the tests performed for each worst case condition for VOC and the results of those tests.
   e. The facility shall document the date of any process changes that result in a new operating scenario. For each of these changes, the facility shall document the product made and the operating scenario and the corresponding emission estimates and information, as specified in Condition 5.DE(a) and (b) above. If a new operating scenario results in a new worst case scenario with a possible emission increase for VOC, the facility shall perform emissions testing for that pollutant within 90 days of the change or request a determination from the IDNR. The facility shall also document these actions upon completion.

Control Equipment Requirements

E. All process and control equipment for this process shall be operated and maintained according to the manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall maintain a record of all inspections and maintenance and any actions resulting from the inspections and maintenance of the process and control equipment in this process.

F. The owner or operator shall operate the control equipment at all times when equipment which vents to the control equipment is operating.

G. The differential pressure drop across the Final Baghouse (CE DF8 3430) shall be maintained between 1.0 and 7.0 inches water column except during periods of filter replacement.
   (1) The owner or operator shall record the pressure drop across the Final Baghouse (CE DF8 3430), in inches of water column, on a daily basis. If the pressure drop across the Final Baghouse (CE DF8 3430) falls outside the range of 1.0 and 7.0 inches water column, the owner or operator shall investigate the baghouse and make necessary corrections. The owner or operator shall also collect and record the pressure drop across all other baghouses associated with the DF#8 plant, in inches water column, on a daily basis. If the pressure drop across any of these baghouses falls outside the range
specified by the manufacturer, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall maintain a record of all corrective actions taken on any of the baghouses associated with the DF#8 plant. This requirement shall not apply on any days that the process is not in operation.

NSPS and NESHAP Requirements

H. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   a. The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

I. All batch process vents associated with DF#8 shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, §63.2550.
   a. The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with DF#8, according to 40 CFR Part 63 Subpart FFFF, §63.2550.
   b. As specified in §63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (DF#8) using the procedures specified in §63.1257(d)(2)(i) and (ii), except as specified in paragraphs §63.2460 (b)(1) through (7).
   c. As specified in §63.2445(d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph §63.2460 (b)(6)(i) or (ii). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.
   d. As specified in §63.2525(e)(4), unless one of the conditions specified in paragraphs §63.2525 (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
      i. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
      ii. A record of whether each batch operated was considered a standard batch.
      iii. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
      iv. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

J. All continuous process vents associated with DF#8 shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, §63.2550.
a. The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with DF#8, according to 40 CFR Part 63 Subpart FFFF, §63.2550.
b. As specified in §63.2455(b), for each continuous process vent in DF#8, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in §63.115(d), except as specified in paragraphs §63.2455 (b)(1) through (3).
c. As specified in §63.2445(d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide a report as specified in paragraph §63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

K. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

L. The facility shall analyze any changes in formulations and determine if there is a change in applicability for any NSPS or NESHAP subparts for DF#8.
   a. The facility shall document the results of any NSPS or NESHAP determinations as required above.

Authority for Requirement: DNR Construction Permit 99-A-409-S3

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 99-A-409-S3
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 90  
Stack Opening, (inches, dia.): 30  
Exhaust Flow Rate (scfm): 15,000  
Exhaust Temperature (°F): 120  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: DNR Construction Permit 99-A-409-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☑  
Facility Maintained Operation & Maintenance Plan Required? Yes ☑ No ☐  
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☑ No ☐

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number: DF#9**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk Bag Unloader #1 (EU 4101)</td>
<td>Nuisance Baghouse (CE 4130)</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>Drum Dump (EU 4102)</td>
<td>Nuisance Baghouse (CE 4130)</td>
<td>1,000 lb/hr</td>
</tr>
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<td>Batching Station/ Dumping Hood (EU 4140)</td>
<td>Nuisance Baghouse (CE 4130)</td>
<td>1,000 lb/hr</td>
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<tr>
<td>Lump Breaker (EU 4103)</td>
<td>NA(1)</td>
<td>1,000 lb/hr</td>
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<tr>
<td>Pneumatic Conveyance (EU 4142)</td>
<td>Blender #1 Baghouse (CE 4105)</td>
<td>1,000 lb/hr</td>
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<tr>
<td>Blender #1 (EU 4104)</td>
<td>Blender #1 Baghouse (CE 4105)</td>
<td>1,000 lb/hr</td>
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<tr>
<td>Feeder #1 (EU 4107)</td>
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<td>Hammer Mill (EU 4108)</td>
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<td>Blender #2 (EU 4109)</td>
<td>Blender #1 Baghouse (CE 4105)</td>
<td>1,000 lb/hr</td>
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<td>Feeder #2 (EU 4110)</td>
<td>NA(1)</td>
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<td>Air Mill (EU 4111)</td>
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<td>Pneumatic Conveyance (EU 4143)</td>
<td>Blender #3 Baghouse (CE 4113)</td>
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<td>Blender #3 (EU 4112)</td>
<td>Blender #3 Baghouse (CE 4113)</td>
<td>1,000 lb/hr</td>
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<tr>
<td>Rotary Sifter (EU 4115)</td>
<td>Nuisance Baghouse (CE 4130)</td>
<td>1,000 lb/hr</td>
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<td>Pneumatic Conveyance (EU 4144)</td>
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<td>BDF (EU 4117)</td>
<td>BDF Baghouse (CE 4116)</td>
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<tr>
<td>Feeder #3 (EU 4118)</td>
<td>NA(1)</td>
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<tr>
<td>Flexomix (EU 4119)</td>
<td>Nuisance Baghouse (CE 4130)</td>
<td>1,000 lb/hr</td>
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<td>Kneader (EU 4122)</td>
<td>Nuisance Baghouse (CE 4130)</td>
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<tr>
<td>Basket Granulator (EU 4120)</td>
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<td>Pan Granulator (EU 4123)</td>
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<tr>
<td>Twin Dome Extruder (EU 4121)</td>
<td>None(2)</td>
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<tr>
<td>Vibratory Fluid Bed Dryer (EU 4124)</td>
<td>Dryer Baghouse (CE 4132)</td>
<td>1,000 lb/hr, 2.25 MMBtu/hr</td>
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<tr>
<td>Bucket Elevator (EU 4126)</td>
<td>Nuisance Baghouse (CE 4130)</td>
<td>1,000 lb/hr</td>
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<tr>
<td>Vibratory Screener (EU 4127)</td>
<td>Nuisance Baghouse (CE 4130)</td>
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<tr>
<td>Reject Drum (EU 4145)</td>
<td>Nuisance Baghouse (CE 4130)</td>
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<tr>
<td>Rotary Screener/Separator (EU 4128)</td>
<td>Nuisance Baghouse (CE 4130)</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>Finished Product Hopper (EU 4141)</td>
<td>Nuisance Baghouse (CE 4130)</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>Packaging Area (EU 4129)</td>
<td>Nuisance Baghouse (CE 4130)</td>
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</tr>
<tr>
<td>Recycle Hopper (EU 4139)</td>
<td>Nuisance Baghouse (CE 4130)</td>
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<tr>
<td>HVFS (EU 41HVFS)</td>
<td>HVFS Baghouse (CE 4136)</td>
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<tr>
<td>Bulk Bag Unloader #2 (EU 4150)</td>
<td>Nuisance Baghouse (CE 4130)</td>
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<tr>
<td>Bulk Bag Unloader #2 Auger (EU 4151)</td>
<td>NA(1)</td>
<td>4,000 lb/hr</td>
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<tr>
<td>Bulk Bag Unloader #3 (EU 4152)</td>
<td>Nuisance Baghouse (CE 4130)</td>
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<tr>
<td>Bulk Bag Unloader #3 Auger (EU 4153)</td>
<td>NA(1)</td>
<td>4,000 lb/hr</td>
</tr>
<tr>
<td>Bulk Bag Unloader Hopper (EU 4154)</td>
<td>Nuisance Baghouse (CE 4130)</td>
<td>2,500 lb/hr</td>
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<tr>
<td>Bulk Bag Unloader Lump Breaker (EU 4155)</td>
<td>NA(1)</td>
<td>2,500 lb/hr</td>
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<tr>
<td>Bulk Bag Unloader Pneumatic Conveyance (EU 4156)</td>
<td>Blender #1 Baghouse (CE 4105)</td>
<td>2,500 lb/hr</td>
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<tr>
<td>Pneumatic Conveyance (EU 4157)</td>
<td>Blender #1 Baghouse (CE 4105)</td>
<td>500 lb/hr</td>
</tr>
</tbody>
</table>

**Raw Material/Fuel: Herbicide Ingredients**
Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 09-A-023-S4

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM$_{2.5}$
Emission Limit(s): 1.16 lb/hr
Authority for Requirement: DNR Construction Permit 09-A-023-S4

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.16 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 09-A-023-S4

Pollutant: Sulfur Dioxide (SO$_2$)
Emission Limit(s): 500 ppm
Authority for Requirement: 567 IAC 23.3(2)"e"
DNR Construction Permit 09-A-023-S4

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 7.85 lbs/hr
Authority for Requirement: DNR Construction Permit 09-A-023-S4

Pollutant: Single Hazardous Air Pollutant
Emission Limit(s): 2.05 lb/hr
Authority for Requirement: DNR Construction Permit 09-A-023-S4

Pollutant: Total Hazardous Air Pollutants
Emission Limit(s): 4.22 tons/yr
Authority for Requirement: DNR Construction Permit 09-A-023-S4

Pollutant: Total Organic Hazardous Air Pollutants
Emission Limit(s): 98% Reduction or 20 ppm, (2)
Authority for Requirement: DNR Construction Permit 09-A-023-S4

(2) The emission limit is for Group 1 continuous process vents in Table 1 to Subpart FFFF of Part 63 –
Emission Limits and Work Practice Standards for Continuous Process Vents. Reduce emissions of Total Organic HAP by ≥ 98 percent by weight or to an outlet process concentration ≤ 20 ppm, as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except a flare).

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements

A. The facility shall only combust natural gas or propane in the Dryer (EU 4124).

B. The average hourly production rate of this plant (DF-9) shall not exceed 1,000 pounds per hour (lbs/hr) calculated on a daily basis.
   (1) The facility shall calculate and record the average hourly production rate (lbs/hr) of this plant (DF-9):
      (a) The facility shall record the amount of product produced by DF-9, in pounds, on a daily basis;
      (b) The facility shall record the hours of operation for DF-9, on a daily basis. The hours of operation for the process is defined as the amount of time that the Final Baghouse (CE 4130) operates;
      (c) The facility shall calculate and record on a daily basis the average hourly production rate (lbs/hr) for DF-9 based on the daily amount of product produced and daily hours of operation.

C. As specified in Section 2, VOC, Single HAP and Total HAP testing shall be conducted under worst case conditions that are expected to result in the highest VOC, Single HAP, and Total HAP emission rates. If process changes are made that result in a new worst case condition that could reasonably be expected to increase VOC, Single HAP, or Total HAP emissions, the facility shall perform emissions testing within 90 days of the change or request a determination from the IDNR.
   (1) The facility shall document all products made and the corresponding operating scenarios.
   (2) The facility shall estimate total VOC emissions for all operating scenarios. The estimates shall be performed using the emission estimation methods specified in conditions J(2) and K(2) of this section or other IDNR approved methods. The facility shall document all information need to perform the calculation, including, but not limited to: calculation methods, emission episodes, materials used, process temperatures, and process pressures.
   (3) The facility shall document the worst-case condition for VOC, Single HAP, and Total HAP. This will include the product made, the corresponding operating scenario, and the VOC, Single HAP, and Total HAP emissions rates.
   (4) The facility shall document the date of the tests performed for each worst case condition for VOC, Single HAP, and Total HAP and the results of those tests.
(5) The facility shall document the date of any process changes that results in a new operating scenario. For each of these changes, the facility shall document the product made and the operating scenario and the corresponding emission estimates and information, as specified in conditions (1), (2), and (3) above. If a new operating scenario results in a new worst case scenario with a possible emission increase for VOC, Single HAP, and/or Total HAP, the facility shall perform emissions testing for that pollutant within 90 days of the change or request a determination from the IDNR. The facility shall also document these actions upon completion.

D. For each product produced in the DF-9 plant, the owner or operator shall identify and document each VOC and HAP containing material used or produced.

E. The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials used or produced in the DF-9 plant.

Control Equipment Requirements

F. All process and control equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.

   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the control and process equipment for this process.

G. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

H. The differential pressure drop across the Final Baghouse (4134) shall be maintained between 1.0 and 7.0 inches water column except during periods of filter replacement.

   (1) The owner or operator shall collect and record the pressure drop across Final Baghouse (4134), in inches of water, on a daily basis. If the pressure drop across the Final Baghouse (4134) falls outside the range specified above, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall also collect and record the pressure drop across all other baghouses associated with this permit, in inches of water, on a daily basis. If the pressure drop across any of these baghouses falls outside the range specified by the manufacture, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the process is not in operation.

I. The auxiliary fuel combusted in the Regenerative Thermal Oxidizer (CE 4150) shall be limited to natural gas or propane.

J. The owner or operator shall maintain the temperature (1-hour average) of the Regenerative Thermal Oxidizer (CE 4150) during operation of no less than 50 degrees Fahrenheit below the average temperature recorded during the most recent performance test which demonstrated compliance with the VOC and HAP emission limits.

   (1) The owner or operator shall install, calibrate, operate, and maintain equipment necessary to continuously monitor the temperature of the Regenerative Thermal Oxidizer (CE 4150). This equipment shall be installed, operated, and maintained in accordance with the facility’s operation and maintenance plan.
(2) The owner or operator shall collect and record the temperature of the Regenerative Thermal Oxidizer (CE 4150) at a minimum of once every 15 minutes and calculate and record the 1-hour block average. The 1-hour block average shall be calculated using all data points collected during the averaging period.

(3) The owner or operator shall retain the most recent stack tests for the Regenerative Thermal Oxidizer (CE 4150) that demonstrated compliance with the VOC and HAP emission limits. The permittee shall document the average temperature recorded during those tests, and calculate and document the minimum temperature the Regenerative Thermal Oxidizer (CE 4150) shall operate above (50 degrees Fahrenheit below the average temperature recorded during most recent the VOC and HAP performance test which demonstrated compliance with the VOC and HAP emission limits).

NSPS or NESHAP Requirements

K. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall be in compliance with the emission limits and work practice standards in Table 1 of 40 CFR Part 63 Subpart FFFF, and the applicable requirements specified in §§63.2455 for all continuous process vents.

(2) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

L. All batch process vents associated with DF-9 shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with DF-9, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (DF-9) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

(3) As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

(4) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525s (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:

i. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.

ii. A record of whether each batch operated was considered a standard batch.
iii. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

iv. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

M. As required by 40 CFR §63.2450(e)(1), the owner or operator reducing organic HAP emissions through a closed-vent system to any combination of control devices (except a flare) shall comply with the applicable requirements in §63.982(c) and the requirements referenced therein.

(1) The owner or operator shall meet all of the applicable recordkeeping requirements for closed-vent system, as specified in 40 CFR Part 63 Subpart FFFF and §63.998(d), and the requirements referenced therein.

N. As specified in §63.988, a temperature monitoring device capable of providing a continuous record of the temperature of the Regenerative Thermal Oxidizer (CE 4150) is required. As specified in §63.988(c)(1), the temperature monitoring device shall be installed in the fire box or in the ductwork immediately downstream of the fire box in a position before any substantial heat exchange occurs.

O. As specified in §63.996(c), the following conditions for the temperature monitoring system shall be followed:

(1) All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(2) The owner or operator shall maintain and operate the equipment in a manner consistent with good air pollution control practices.

(a) The owner or operator shall ensure the immediate repair or replacement of parts to correct "routine" or otherwise predictable equipment malfunctions. The necessary parts for routine repairs of the affected equipment shall be readily available.

(b) The owner or operator shall develop and follow a start-up, shutdown, and malfunction plan, and equipment must be repaired immediately, this action shall be recorded as specified in §63.998(c)(1)(ii)(E).

(3) All monitoring equipment shall be installed and operational, and the data verified as specified in Subpart FFFF or SS either prior to or in conjunction with conducting performance tests. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(4) All monitoring equipment shall be installed such that representative measurements of parameters from the regulated source are obtained.

(5) In accordance with the 40 CFR Part 63 Subpart FFFF, except for system breakdowns, repairs, maintenance periods, instrument adjustments, or checks to maintain precision and accuracy, calibration checks, and zero and span adjustments, the temperature monitoring systems shall be in continuous operation when emissions are being routed to the monitored device.
(6) The owner or operator shall establish a range for monitored parameters that indicates proper operation of the Regenerative Thermal Oxidizer (CE 4150). In order to establish the range, the information required in §63.999(b)(3) shall be submitted in the Notification of Compliance Status or the operating permit application or amendment. The range may be based upon a prior performance test meeting the specifications of §63.997(b)(1) or a prior TRE index value determination, as applicable, or upon existing ranges or limits established under 40 CFR Part 63 Subpart FFFF.

P. The owner or operator shall meet all of the applicable recordkeeping requirements for the temperature monitoring system, as specified in 40 CFR Part 63 Subpart FFFF, §63.2525, §63.998(b), §63.998(c) and §63.998(d), and the requirements referenced therein. This includes records of the daily average value of the temperature of the Regenerative Thermal Oxidizer (CE 4150) for each operating day determined according to the procedures specified in §63.998(b)(3)(i) and (ii) and records of periods when the temperature drops below the operating range established pursuant to § 63.996(c)(6) as specified in §63.998(d).

Q. All wastewater streams that are part of the miscellaneous organic chemical process unit for the DF 9 process shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.

1. The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

R. As specified in § 63.2445(d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

S. The facility shall analyze any changes in formulations and determine if there is a change in applicability for any NSPS or NESHAP subparts for DF-9.

1. The facility shall document the results of any NSPS or NESHAP determinations as required above.

Authority for Requirement:  DNR Construction Permit 09-A-023-S4

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:  DNR Construction Permit 09-A-023-S4

40 CFR 63 Subpart FFFF

567 IAC 23.1(4)"cf"
**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

- **Stack Height**, (ft, from the ground): 67
- **Stack Opening**, (inches, dia.): 28
- **Exhaust Flow Rate** (scfm): 14,000
- **Exhaust Temperature** (°F): 200
- **Discharge Style**: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 09-A-023-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☐
- **Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☐
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☐ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: DF#11-Equipment Leaks

Associated Equipment

Emission Unit vented through this Emission Point: DF#11-Equipment Leaks
Emission Unit Description: DF#11 Equipment Leaks
Raw Material/Fuel: Herbicide
Rated Capacity: N/A

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.23 tons/yr
Authority for Requirement: DNR Construction Permit 14-A-556

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

Operating limits for this emission unit shall be:

A. The process DF#11 shall have a maximum of 0 gas valves, 0 light liquid valves, 14 heavy liquid valves, 0 light liquid pumps, 2 heavy liquid pumps, 164 connectors, 0 compressors, 0 pressure relief valves, 0 open-ended line, 0 sample connections, and 0 agitators. The terms “light liquid” and “heavy liquid” shall have the same definitions as “in light liquid service” and “in heavy liquid service” found in NSPS 40 CFR Part 60 Subpart VVa, §60.481a, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

B. The facility shall analyze any changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for DF#11.

Recordkeeping

A. The owner or operator shall keep an equipment component count, which shall be documented as to the number and types of components used.
B. The facility shall document the results of any NSPS or NESHAP determinations as required in Section 14.B of the permit.

C. The facility shall maintain a copy of the Material Safety Data Sheet (MSDS) for all materials used in the equipment covered by this permit.

Authority for Requirement: DNR Construction Permit 14-A-556

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 14-A-556
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☑

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☑

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☑

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number:** HR

**Associated Equipment**

**Associated Emission Unit ID Numbers** (if multiple units vent thru this EP): HR

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**Emission Unit vented through this Emission Point:** HR  
**Emission Unit Description:** Facility Haul Roads  
**Raw Material/Fuel:** Fugitive Dust  
**Rated Capacity:** N/A

**Applicable Requirements**

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**  
The emissions from this emission point shall not exceed the levels specified below.

**Pollutant:** Fugitive Dust  
**Emission Limit:** No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

**Authority for Requirement:** DNR Construction Permit 14-A-557  
567 IAC 23.3(2)"c"

**Operating Requirements with Associated Monitoring and Recordkeeping**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**Operating limits for this emission unit shall be:**

A. All haul road(s) at the facility shall be paved.  
B. The average haul road(s) surface silt loading, as defined in AP-42 section 13.2.1, for all haul road(s) at the facility shall not exceed 3.05 g/m².  
C. The haul roads covered under this permit are required to employ best management practices to reasonably prevent the discharge of fugitive dust from all haul roads beyond the lot line of the property on which it is located. These BMP are examples of reasonable practices to minimize the generation of fugitive dust emissions.
BMP on haul roads include but are not limited to:

- Limiting truck speed on facility property
- Watering and/or sweeping paved roadways
- Immediately cleaning-up or dampening all material spills on the roadways

Recordkeeping

A. The owner or operator shall determine the silt loading of the paved haul roads monthly with the initial testing being performed within 90 days of the permit issuance date. For each performance test, silt loading sampling shall be done for at least 3 different locations. The three sampled locations shall then be averaged to determine the silt loading average results. The testing shall be completed prior to any cleaning routine done for the paved roads. Silt load testing shall be conducted according to the procedures outlined in AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading and C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples. After two years of silt load testing, the facility may request the Department to reevaluate the silt load sampling frequency requirements.

B. If silt load testing cannot be accomplished because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35°F (1.7°C) or because a representative sample cannot be otherwise obtained, then the testing shall be postponed and accomplished as soon as reasonably possible after the scheduled date. The facility shall document the justification used for any postponed tests.

C. The owner or operator shall maintain a log for each silt load sampling event that contains, at a minimum, the following:

- The date of silt load sampling event;
- The location of the sample;
- The measured silt content in grams;
- Sample area used for silt load sampling in meters;
- The silt loading in g/m²;
- The operator’s initials.

D. The owner or operator shall document all best management practices used at the facility to minimize fugitive dust emissions.

Authority for Requirement: DNR Construction Permit 14-A-557

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☐

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Equipment Leaks for DF-2, 4, 6, 7, 8, 9

**Associated Equipment**

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</tr>
</tbody>
</table>

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**DF#2-EL General Operating Limits and Recordkeeping Requirements**

A. The Building 14 Chiller System shall have a maximum of 0 gas valves, 53 light liquid or heavy liquid valves, 4 light liquid or heavy liquid pumps, 348 connectors, 10 open-ended line, and no compressors, pressure relief valves, sample connections, and agitators.

(1) The owner or operator shall count and document the number and types of components used in Building 14 Chiller System. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. . The
terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1020, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

B. All process equipment for the Building 14 Chiller System shall be operated and maintained according to manufacturer specifications and maintenance schedule.

(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

DF#2-EL NESHAP Subpart FFFF Requirements

C. The facility shall analyze any changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for Building 14 Chiller System.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

D. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

DF#4-EL General Operating Limits and Recordkeeping Requirements

A. All DF#4 Plant equipment shall be operated and maintained according to the manufacturer specifications and maintenance schedule. The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The DF#4 Plant equipment shall have a maximum of 31 light or heavy liquid valves, 7 light or heavy liquid pumps, and 196 light or heavy liquid connectors. The DF#4 Plant equipment shall not include any other valves, compressors, agitators, pressure relief valves, or other components. The owner or operator shall:

a. Count and document the number and types of components used in the DF#4 Plant. Components shall include, but are not limited to, valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquids" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NSPS 40 CFR Part 60 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgement can be used to determine the vapor pressures; and

b. Modify the component count whenever the number of components change.
DF#4-EL NSPS and NESHAP Requirements

C. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   a. The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

D. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in the referenced subparts F, H, or UU.
   a. The owner or operator shall document the subpart they are complying with, and meet all of the applicable requirements as specified in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the owner or operator is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1019 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the owner or operator shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed.

E. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in the DF#4 Plant.
   a. The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

DF#6-EL General Operating Limits and Recordkeeping Requirements

A. The process DF#6 shall have a maximum of 13 light liquid or heavy liquid valves, 6 light liquid or heavy liquid pumps, 221 connectors, and no gas valves, compressors, pressure relief valves, open-ended line, sample connections, and agitators.
   (1) The owner or operator shall count and document the number and types of components used at the plant. Components include but are not limited to valves, pumps, compressor seals, flanges, etc. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures. The company shall modify the component count whenever the number of components change.
   (2) The company shall modify the component count whenever the number of components change.

B. All process equipment for DF#6 shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.
C. For each product produced in the DF#6 plant, the owner or operator shall identify and document each VOC-containing or HAP-containing material used.

D. The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials used in the DF#6 plant.

**DF#6-EL NESHAP Subpart FFFF Requirements**

E. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

F. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in the referenced subparts F, H, or UU.

(1) The permittee shall document the subpart they are complying with, and meet all of the applicable requirements as specified in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the permittee is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1019 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the permittee shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed.

G. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in DF#6.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

**DF#7-EL General Operating Limits and Recordkeeping Requirements**

A. The process DF#7 shall have a maximum of 15 light liquid or heavy liquid valves, 5 light liquid or heavy liquid pumps, 160 connectors, and no gas valves, compressors, pressure relief valves, open-ended line, sample connections, and agitators.

(1) The owner or operator shall count and document the number and types of components used at the plant. Components include but are not limited to valves, pumps, compressor seals, flanges, etc. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NSPS 40 CFR Part 60 Subpart VVa, §60.481a, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures. The company shall modify the component count whenever the number of components change.

B. All process equipment for DF#7 shall be operated and maintained according to manufacturer specifications and maintenance schedule.
(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

C. For each product produced in the DF#7 plant, the owner or operator shall identify and document each VOC-containing or HAP-containing material used.

D. The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials used in the DF#7 plant.

**DF#7-EL NESHAP Subpart FFFF Requirements**

E. The facility shall analyze any changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for DF#7.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

F. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

**DF#8-EL General Operating Limits and Recordkeeping Requirements**

A. All DF#8 Plant equipment shall be operated and maintained according to the manufacturer specifications and maintenance schedule. The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The DF#8 Plant equipment shall have a maximum of 24 light or heavy liquid valves, 5 light or heavy liquid pumps, and 160 light or heavy liquid connectors. The DF#8 Plant equipment shall not include any other valves, compressors, agitators, pressure relief valves, or other components. The owner or operator shall:

   a. Count and document the number and types of components used in the DF#8 Plant. Components shall include, but are not limited to, valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquids" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NSPS 40 CFR Part 60 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgement can be used to determine the vapor pressures; and

   b. Modify the component count whenever the number of components change.

**DF#8-EL NSPS and NESHAP Requirements**

C. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
a. The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

D. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in the referenced subparts F, H, or UU.

a. The owner or operator shall document the subpart they are complying with, and meet all of the applicable requirements as specified in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the owner or operator is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1019 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the owner or operator shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed.

E. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in the DF#8 Plant.

a. The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

DF#9-EL General Operating Limits and Recordkeeping Requirements

A. The process DF-9 shall have a maximum of 12 light liquid or heavy liquid valves, 2 light liquid or heavy liquid pumps, and 125 connectors. The process shall not contain the following equipment: gas valves, compressors, pressure relief valves, open-ended line, sample connections, and agitators.

(1) The owner or operator shall count and document the number and types of components used at the plant. Components include but are not limited to valves, pumps, compressor seals, flanges, etc. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NSPS 40 CFR Part 60 Subpart VVa, §60.481a, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

B. All process equipment for DF-9 shall be operated and maintained according to manufacturer specifications and maintenance schedule.

(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

C. For each product produced in the DF-9 plant, the owner or operator shall identify and document each VOC-containing or HAP-containing material used.

D. The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials used in the DF-9 plant.
DF#9-EL NESHAP Subpart FFFF Requirements
E. The facility shall analyze any changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for DF-9.
   (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

F. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

Authority for Requirement:  DNR Construction Permits Listed in Table: Associated Equipment

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:  DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?  Yes ☐ No ☒
Facility Maintained Operation & Maintenance Plan Required?  Yes ☐ No ☒
Compliance Assurance Monitoring (CAM) Plan Required?  Yes ☒ No ☐

Authority for Requirement:  567 IAC 22.108(3)
**Emission Point ID Number: EC12-BH1**

**Associated Equipment**

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): EC12-BBU71  
Emissions Control Equipment ID Number: CE-EC12-BH1  
Emissions Control Equipment Description: Baghouse  
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: EC12-BBU71  
Emission Unit Description: EC 12 Tank 71 Bulk Bag Unloader  
Raw Material/Fuel: Herbicide  
Rated Capacity: 4,000 lbs/hr

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**  
The emissions from this emission point shall not exceed the levels specified below.

**Pollutant: Opacity**  
Emission Limit(s): 40% (1)  
Authority for Requirement: 567 IAC 23.3(2)"d"  
DNR Construction Permit 17-A-544

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

**Pollutant: PM$_{2.5}$**  
Emission Limit(s): 0.15 lb/hr  
Authority for Requirement: DNR Construction Permit 17-A-544

**Pollutant: PM$_{10}$**  
Emission Limit(s): 0.15 lb/hr  
Authority for Requirement: DNR Construction Permit 17-A-544

**Pollutant: Particulate Matter (PM)**  
Emission Limit(s): 0.15 lb/hr, 0.1 gr/dscf  
Authority for Requirement: 567 IAC 23.3(2)"a"  
DNR Construction Permit 17-A-544
Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

B. All process and control equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

C. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

D. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the EC12 processing line.
   (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 17-A-544

NSPS and NESHAP Applicability

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permits Listed in Table: Associated Equipment
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground):  Vents Indoors  
Stack Opening, (inches, dia.):  Vents Indoors  
Exhaust Flow Rate (scfm):  1,500  
Exhaust Temperature (°F):  70  
Discharge Style:  Vents Indoors  
Authority for Requirement:  DNR Construction Permit 17-A-544

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

**Agency Approved Operation & Maintenance Plan Required?**  
Yes ☐ No ☒

**Facility Maintained Operation & Maintenance Plan Required?**  
Yes ☒ No ☐

**Compliance Assurance Monitoring (CAM) Plan Required?**  
Yes ☐ No ☒

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Number: EC44

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVA Tank (EU TK-4401)</td>
<td>Bag Batching Baghouse (CE EC44-4401-BH)</td>
<td>30,000 gal/day</td>
</tr>
<tr>
<td>PVA Tank – Solids Addition (EU TK-4401-BBS)</td>
<td>Bag Batching Baghouse (CE EC44-4401-BH)</td>
<td>8,500 lb/hr</td>
</tr>
<tr>
<td>Shar (EU TK-4402)</td>
<td>Final Baghouse (CE EC44-4402-BH)</td>
<td>30,000 gal/day</td>
</tr>
<tr>
<td>Shar – Solids Addition (EU TK-4402-BBS)</td>
<td>Final Baghouse (CE EC44-4402-BH)</td>
<td>8,500 lb/hr</td>
</tr>
<tr>
<td>Oil Tank (EU TK-4403)</td>
<td>Final Baghouse (CE EC44-4402-BH)</td>
<td>30,000 gal/day</td>
</tr>
<tr>
<td>Holding Tank (EU TK-4404)</td>
<td>Final Baghouse (CE EC44-4402-BH)</td>
<td>30,000 gal/day</td>
</tr>
<tr>
<td>Check Tank (EU TK-4405)</td>
<td>Final Baghouse (CE EC44-4402-BH)</td>
<td>30,000 gal/day</td>
</tr>
<tr>
<td>Feed/Pack Tank (EU TK-4406)</td>
<td>Final Baghouse (CE EC44-4402-BH)</td>
<td>30,000 gal/day</td>
</tr>
<tr>
<td>Drum Heater (EU EC44-Heater)</td>
<td>Final Baghouse (CE EC44-4402-BH)</td>
<td>30,000 gal/day</td>
</tr>
<tr>
<td>EC44-Screener (EU EC44-Screener)</td>
<td>None(1)</td>
<td>30,000 gal/day</td>
</tr>
<tr>
<td>Box Tank (EU EC44-Box)</td>
<td>None(1)</td>
<td>30,000 gal/day</td>
</tr>
<tr>
<td>Packaging (EU EC44 Packaging)</td>
<td>None(1)</td>
<td>30,000 gal/day</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 12-A-495-S3

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM$_{2.5}$
Emission Limit(s): 0.07 lb/hr
Authority for Requirement: DNR Construction Permit 12-A-495-S3

Pollutant: PM$_{10}$
Emission Limit(s): 0.07 lb/hr
Authority for Requirement: DNR Construction Permit 12-A-495-S3
Pollutant: Particulate Matter (PM)  
Emission Limit(s): 0.07 lb/hr, 0.1 gr/dscf  
Authority for Requirement: 567 IAC 23.3(2)"a"  
DNR Construction Permit 12-A-495-S3

Pollutant: Volatile Organic Compounds (VOC)  
Emission Limit(s): 5.7 tons/yr(2)  
Authority for Requirement: DNR Construction Permit 12-A-495-S3

Pollutant: Volatile Organic Compounds (VOC)  
Emission Limit(s): 21.0 tons/yr(3)  
Authority for Requirement: DNR Construction Permit 12-A-495-S3

(2) Emission limits apply to emissions from the DF#10, EU-SD1 & EC44 processing lines. This limit applies to emission point EP-EC44. The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the EC44 processing line.

(3) Emission limits apply to emissions from the production of products co-produced in the 4L or SF and EC44 processing lines. This limit applies to the following emission points when products are co-produced in the 4L or SF and EC44 processing lines: EP-EC44(i), EP4L-BH1(ii), EPSF-BH1(iii), EPSF-BH2(iv), EPSF-Vent1(v), EP-B17TF-East(vi), EP-B17TF-West(vii), EPB17-LO(viii), EPB11-LO(ix), EP-B13TF-1(x), EPB13-LO(xi), and those covered under the 4L Process Line CAP permit(x) and the Building 11 Storage Tanks CAP permit(xi). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the EC44 co-production processing line.

i) The VOC emission limit only applies to emissions from equipment associated with the production of products co-produced in the 4L or SF and EC44 processing lines for emission point EP-EC44. This limit does not apply when the equipment is handling materials for the production of products not co-produced in the 4L or SF and EC44 processing lines.

ii) The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the production of products co-produced in the 4L or SF and EC44 processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements

A. All process and control equipment for the Building 44 Liquids Plant shall be operated and maintained according to manufacturer specifications and maintenance schedule.

   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.
B. The permittee shall employ good housekeeping practices for the Building 44 Liquids Plant. Cleanup of liquid spills shall be initiated promptly upon discovery.

C. For each product produced in the Building 44 Liquids Plant, the owner or operator shall identify and document each VOC and HAP containing material used or produced.

D. The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials used or produced in the Building 44 Liquids Plant.

E. The facility is limited to operating the Building 44 Liquids Plant a maximum of 6,790 hours per rolling 12-month period.
   (1) The owner or operator shall record on a monthly basis, the number of hours that the Building 44 Liquids Plant is operated, and the rolling 12-month total amount of hours that the Building 44 Liquids Plant is operated.

Control Equipment Requirements

F. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

G. All process and control equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the control and process equipment for this process.

H. The differential pressure drop across the Final Baghouse (CE EC44-4402-BH) shall be maintained between 1.0 and 7.0 inches water column except during periods of filter replacement.
   (1) The owner or operator shall collect and record the pressure drop across Final Baghouse (CE EC44-4402-BH), in inches of water, on a continuous basis. If the pressure drop across the Final Baghouse (CE EC44-4402-BH) falls outside the range specified above, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall also collect and record the pressure drop across all other baghouses associated with this permit, in inches of water, on a daily basis. If the pressure drop across any of these baghouses falls outside the range specified by the manufacture, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the process is not in operation.
Recordkeeping for the 4L or SF and EC44 VOC Emission Cap
The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission (21.0 tpy) limit cap in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products co-produced in the 4L or SF and EC44 processing lines:

Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Bulk Storage Tank Emissions
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

I. The facility shall document each product produced in the EC44 processing line. The facility shall also document whether the product is produced in the EC44 processing line or co-produced with the 4L or SF processing lines.
J. For each product co-produced in the EC44 processing line with the 4L or SF processing lines, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition K.5. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
   (5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee
shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.
(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

K. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.
   (1) The permittee shall use the operating scenarios required in Condition K.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

L. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
   (2) The daily number of standard or nonstandard batches completed for each product produced.

M. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

N. If the 12-month rolling total of the VOC emissions exceeds 17.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 17.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 17.0 tons, daily recordkeeping will be required per this section of this permit.
Recordkeeping for the EC44 VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission (5.7 tpy) limit cap in the emission limit section of this permit. These requirements pertain to the following emission episodes for the EC44 processing line:

Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Bulk Storage Tank Emissions
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

O. The facility shall document each product produced in the EC44 processing line.

P. For each product produced in the EC44 processing line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

1. The permittee shall identify and document each product produced.

2. The permittee shall identify and document each standard and nonstandard batch used to produce each product.

3. The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition Q.5. The facility shall document and provide a justification for the value for each input used.

4. The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

5. The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or
Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

Q. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.
(1) The permittee shall use the operating scenarios required in Condition Q.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

R. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
   (2) The daily number of standard or nonstandard batches completed for each product produced.

S. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

T. If the 12-month rolling total of the VOC emissions exceeds 4.25 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 4.25 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 4.25 tons, daily recordkeeping will be required per this section of this permit.

**NSPS or NESHAP Requirements**

U. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

V. Upon and after the compliance date for 40 CFR Part 63 Subpart FFFF, all batch process vents that are part of the miscellaneous organic chemical process unit for the Building
44 Liquids Plant shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the Building 44 Liquids Plant, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the Building 44 Liquids Plant) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

(3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525s (e)(1) through (3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
   a. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
   b. A record of whether each batch operated was considered a standard batch.
   c. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
   d. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

W. Upon the compliance date for 40 CFR Part 63 Subpart FFFF, any continuous process vents that are part of the miscellaneous organic chemical process unit for the Building 44 Liquids Plant shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the Building 44 Liquids Plant, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2455 (b), for each continuous process vent in the Building 44 Liquids Plant, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).

X. After the compliance date for 40 CFR Part 63 Subpart FFFF, the material stored in the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 44 Liquids Plant with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) After the compliance date for 40 CFR Part 63 Subpart FFFF, the owner or operator shall determine and document the group status for the storage tanks that are part of the miscellaneous organic chemical process unit for the Building 44 Liquids Plant, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

Y. After the compliance date for 40 CFR Part 63 Subpart FFFF, the facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted
average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 44 Liquids Plant, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) Upon the compliance date for 40 CFR Part 63 Subpart FFFF, the owner or operator shall determine and document the group status for the transfer racks that are part of the miscellaneous organic chemical process unit for the Building 44 Liquids Plant, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

Z. Upon the compliance date for 40 CFR Part 63 Subpart FFFF, any wastewater streams that are part of the miscellaneous organic chemical process unit for the Building 44 Liquids Plant shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.

(1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

AA. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

BB. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the Building 44 Liquids Plant.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 12-A-495-S3
**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 12-A-495-S3
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 37
Stack Opening, (inches, dia.): 14
Exhaust Flow Rate (scfm): 2,000
Exhaust Temperature (°F): 100
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 12-A-495-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

| Agency Approved Operation & Maintenance Plan Required? | Yes ☑️  No ☒ |
| Facility Maintained Operation & Maintenance Plan Required? | Yes ☑️  No ☒ |
| Compliance Assurance Monitoring (CAM) Plan Required? | Yes ☑️  No ☒ |

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: B44-EL

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): EC44-EL

Emission Unit vented through this Emission Point: B44-EL
Emission Unit Description: Building 44 Equipment Leaks
Raw Material/Fuel: Herbicide
Rated Capacity: N/A

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permit 17-A-210-S2

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements
A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.
B. For all VOC containing materials handled in the EC44 processing line, the owner or operator shall record and document the material handled and the origins of the material (i.e. EC44 processing line, 4L and SF processing lines, etc.).
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials handled in the EC44 processing line.
C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
D. The equipment used in Building 44 shall have a maximum of 132 heavy liquid valves, 18 heavy liquid pumps, 956 connectors, 6 open-ended lines, and 9 heavy liquid sample connections. The process shall not use any light liquid components, gas valves,
compressors, agitators, or pressure relief valves. This shall include all of the equipment used in Building 44 to handle any VOC-containing material.

1) The owner or operator shall count and document the number and types of components used in Building 44. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

2) The company shall modify the component count whenever the number of components change.

NSPS and NESHAP Requirements

E. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing—Subpart FFFF.

1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

F. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in in the referenced subparts F, H, or UU.

1) The permittee shall document the subpart they are complying with, and meet all of the applicable requirements as specified in in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the permittee is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1019 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the permittee shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed.

G. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in Building 44.

1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 17-A-210-S2
NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:  
DNR Construction Permit 17-A-210-S2
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?  Yes ☐ No ☒
Facility Maintained Operation & Maintenance Plan Required?  Yes ☐ No ☒
Compliance Assurance Monitoring (CAM) Plan Required?  Yes ☐ No ☒

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Number: EL B42 & B46

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): EL B42 & B46

Emission Unit vented through this Emission Point: EL B42 & B46
Emission Unit Description: VOC Emissions from Equipment Leaks for Buildings B42, B46, B48 Pump House, & Associated Outdoor Equipment
Raw Material/Fuel: Herbicide
Rated Capacity: N/A

Applicable Requirements

**Emission Limits (lb/hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permit 14-A-543-S3

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials handled in B42, B46, B48 Pump House, & associated outdoor equipment, the owner or operator shall record and document the material handled and the origins of the material (i.e. Area 46, B37 processing lines, bulk terminal materials).
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials handled in B42, B46, B48 Pump House, & associated outdoor equipment.
C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

(1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

D. The combined equipment count for buildings B42 shall not exceed 0 gas valves, 0 light liquid valves, 452 heavy liquid valves, 0 light liquid pumps, 40 heavy liquid pumps, 0 light liquid connectors, 2,421 heavy liquid connectors, 0 compressors, 0 pressure relief valves, 29 open-ended lines, 33 sample connections, and 0 agitators.

(1) The owner or operator shall count and document the number and types of components used in buildings B42. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are “light liquid” or “heavy liquid” components. The terms “light liquid” and “heavy liquid” shall have the same definitions as “in light liquid service” and “in heavy liquid service” found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

E. The maximum HAP content of any material used in buildings B42 equipment shall be 62.0%, by weight.

F. The combined equipment count for buildings B46 and B48 Pump House, & associated outdoor equipment shall not exceed 0 gas valves, 0 light liquid valves, 92 heavy liquid valves, 0 light liquid pumps, 10 heavy liquid pumps, 0 light liquid connectors, 650 heavy liquid connectors, 0 compressors, 0 pressure relief valves, 0 open-ended lines, 9 sample connections, and 0 agitators.

(1) The owner or operator shall count and document the number and types of components used in buildings B46 and the B48 Pump House & associated outdoor equipment. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are “light liquid” or “heavy liquid” components. The terms “light liquid” and “heavy liquid” shall have the same definitions as “in light liquid service” and “in heavy liquid service” found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

G. The maximum HAP content of any material used in buildings B46 and B48 Pump House, & associated outdoor equipment shall be 70.0%, by weight.
H. The equipment used in B42, B46, B48 Pump House, & associated outdoor equipment for the B37 processing lines shall have a maximum of 129 heavy liquid valves, 12 heavy liquid pumps, 759 heavy liquid connectors and 11 heavy liquid sample connections. The process shall not use any light liquid components, or any gas valves, compressors, agitators, open-ended lines, or pressure relief valves. This shall include all of the equipment used in B42, B46, B48 Pump House, & associated outdoor equipment for the B37 processing lines.

(1) The owner or operator shall count and document the number and types of components used in B42, B46, B48 Pump House, & associated outdoor equipment for the Building 37 (B37) processing lines. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are “light liquid” or “heavy liquid” components. The terms “light liquid” and “heavy liquid” shall have the same definitions as “in light liquid service” and “in heavy liquid service” found in NSPS 40 CFR Part 60 Subpart VVa, §60.481a, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall update the component count whenever the number of components change for the equipment used in B42, B46, B48 Pump House, & associated outdoor equipment for the B37 processing lines.

**NSPS and NESHAP Requirements**

I. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing—Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

J. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in in the referenced subparts F, H, or UU.

(1) The permittee shall document the subpart they are complying with, and meet all of the applicable requirements as specified in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the permittee is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1019 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the permittee shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed.

K. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in Building 37 or Area 46.
(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 14-A-543-S3

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 14-A-543-S3
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Approved Operation &amp; Maintenance Plan Required?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number:** EL B40 & B45

**Associated Equipment**

**Associated Emission Unit ID Numbers** (if multiple units vent thru this EP): EL B40 & B45

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Emission Unit vented through this Emission Point: EL B40 & B45

Emission Unit Description: VOC Emissions from Equipment Leaks for buildings B40, B45, B49 Pump House, & Associated Outdoor Equipment

Raw Material/Fuel: Herbicide

Rated Capacity: N/A

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

None at this time.

**Authority for Requirement:** DNR Construction Permit 14-A-536-S2

**Operating Requirements with Associated Monitoring and Recordkeeping**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.

(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials handled in buildings B40, B45, B49 Pump House, & associated outdoor equipment, the owner or operator shall record and document the material handled.

(1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all VOC containing materials handled in buildings B40, B45, B49 Pump House, & associated outdoor equipment.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
(2) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

D. The combined equipment count for buildings B40, B45, B49 Pump House, & associated outdoor equipment shall have a maximum of 7 gas valves, 0 light liquid valves, 473 heavy liquid valves, 48 DMA valves with manufacturer’s guaranteed leak rate of 0.03 gram/hour, 0 light liquid pumps, 31 heavy liquid pumps, 15 gas connectors, 140 light liquid connectors, 2,624 heavy liquid connectors, 0 compressors, 0 pressure relief valves, 33 open-ended lines, 17 sample connections, 0 agitators, and 5 light liquid pressurized railcar threaded connections.

(1) The owner or operator shall count and document the number and types of components used in buildings B40, B45, B49 Pump House, & associated outdoor equipment. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NESHAP 40 CFR Part 63 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

E. The maximum HAP content of any material used in for buildings B40, B45, B49 Pump House, & associated outdoor equipment shall be 1.0%, by weight.

NSPS and NESHAP Requirements

F. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

G. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in in the referenced subparts F, H, or UU.

(1) The permittee shall document the subpart they are complying with, and meet all of the applicable requirements as specified in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the permittee is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1019 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the permittee shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed.

H. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in buildings B40, B45, B49 Pump House, & associated outdoor equipment.
(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 14-A-536-S2

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 14-A-536-S2
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes [ ] No [X]  
Facility Maintained Operation & Maintenance Plan Required? Yes [ ] No [X]  
Compliance Assurance Monitoring (CAM) Plan Required? Yes [ ] No [X]  

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number:** 24-HR

**Associated Equipment**

**Associated Emission Unit ID Numbers** (if multiple units vent thru this EP): 24-HR

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**Emission Unit vented through this Emission Point:** 24-HR

**Emission Unit Description:** Building 24 Haul Roads

**Raw Material/Fuel:** Fugitive dust

**Rated Capacity:** N/A

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**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

**Pollutant:** Fugitive Dust

**Emission Limit:** No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

**Authority for Requirement:** DNR Construction Permit 19-A-064

567 IAC 23.3(2)"c"

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**Operating Requirements with Associated Monitoring and Recordkeeping**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The maximum vehicle weight, including cargo, of the vehicles traveling the haul roads for the Building 24 tank farms and loadouts for Bulk Transfer Operations shall be not exceed the maximum vehicle weight in 23 CFR§658.17(b).

(1) The facility shall keep a copy of 23 CFR§658.17(b).

(2) If the maximum vehicle weight is increased in 23 CFR§658.17(b) or if 23 CFR§658.17(b) is rescinded, the facility has 30 days to request a modification of this permit.

B. The vehicle miles traveled by trucks used for Building 24 tank farms and the associated loadouts for Bulk Transfer Operations shall be less than 45,200 per rolling 12-month
period. The owner or operator shall determine and record the following for Buildings 24 Bulk Transfer Operations:

1. All road segments used and the corresponding lengths in miles, which includes all roads to bring materials in, internal handling, and transporting finished materials out.
2. The number of trips taken on each road segment transporting materials in and product out of the facility shall be recorded each day.
3. The number of trips taken on the internal road segments shall be calculated using the following method:
   i. Record the amount of material and volume of the mini bulk, in gallons, used each day.
   ii. Each month, calculate the number of mini bulks by dividing the volume of product by the volume of the mini bulk used. One mini bulk equals one round trip between internal buildings.
4. Each month, calculate the total vehicle miles traveled (VMT) by multiplying the number of trips taken on each road segment by the distance of the corresponding road segment and summing the results.
5. Calculate and record the twelve-month rolling total of total VMT in miles, monthly.

C. The haul roads covered under this permit are required to employ best management practices to reasonably prevent the discharge of fugitive dust from all haul roads beyond the lot line of the property on which it is located. These BMP are examples of reasonable practices to minimize the generation of fugitive dust emissions.

**BMP on haul roads include but are not limited to:**

- Limiting truck speed on facility property
- Watering and/or sweeping paved roadways
- Immediately cleaning-up or dampening all material spills on the roadways

1. The owner or operator shall document all best management practices used at the facility to minimize fugitive dust emissions.

Authority for Requirement:  DNR Construction Permit 19-A-064

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?**  Yes ☐ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?**  Yes ☐ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?**  Yes ☐ No ☒

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Number: Area 46 Haul Road Traffic

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): Area 46 Haul Roads

Emission Unit vented through this Emission Point: Area 46 Haul Roads
Emission Unit Description: Area 46 Haul Roads
Raw Material/Fuel: Fugitive dust
Rated Capacity: N/A

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: DNR Construction Permit 14-A-537
567 IAC 23.3(2)"c"

Pollutant: Particulate Matter (PM$_{10}$)
Emission Limit: 12.0 tons/yr
Authority for Requirement: DNR Construction Permit 14-A-537

Pollutant: Particulate Matter (PM$_{2.5}$)
Emission Limit: 7.0 tons/yr
Authority for Requirement: DNR Construction Permit 14-A-537

Pollutant: Particulate Matter
Emission Limit: 22.0 tons/yr
Authority for Requirement: DNR Construction Permit 14-A-537

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit
shall be:

A. All haul road(s) at the facility shall be paved.

B. The haul roads covered under this permit are required to employ best management practices to reasonably prevent the discharge of fugitive dust from all haul roads beyond the lot line of the property on which it is located. These BMP are examples of reasonable practices to minimize the generation of fugitive dust emissions.

BMP on haul roads include but are not limited to:

- Limiting truck speed on facility property
- Watering and/or sweeping paved roadways
- Immediately cleaning-up or dampening all material spills on the roadways

Authority for Requirement: DNR Construction Permit 14-A-537

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes [] No [x]

Facility Maintained Operation & Maintenance Plan Required? Yes [] No [x]

Compliance Assurance Monitoring (CAM) Plan Required? Yes [] No [x]

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: HR-B21-25-26-27

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): HR-B21-25-26-27

Emission Unit vented through this Emission Point: HR-B21-25-26-27
Emission Unit Description: Building 21, 25, 26, and 27 Haul Roads
Raw Material/Fuel: Herbicide
Rated Capacity: N/A

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: DNR Construction Permit 18-A-362-S1
567 IAC 23.3(2)"c"

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

A. The maximum vehicle weight, including cargo, of the vehicles traveling the haul roads for the Building 21 Process Area and building 21, 25, 26, and 27 tank farms and loadouts for Bulk Transfer Operations shall be not exceed the maximum vehicle weight in 23 CFR§658.17(b).
   (1) The facility shall keep a copy of 23 CFR§658.17(b).
   (2) If the maximum vehicle weight is increased in 23 CFR§658.17(b) or if 23 CFR§658.17(b) is rescinded, the facility has 30 days to request a modification of this permit.

B. The vehicle miles traveled by trucks used for Building 21, 25, 26, and 27 tank farms and the associated loadouts for Bulk Transfer Operations shall be less than 34,000 per rolling 12 month period. The owner or operator shall determine and record the following for Buildings 21, 25, 26, and 27 Bulk Transfer Operations on a monthly basis:
   (1) All haul roads (material in and out, internal handling) used and the corresponding lengths.
(2) The number of trips taken on each haul road route.
(3) The total vehicle miles travelled (VMT). This shall be accomplished by multiplying the number of trips taken on each haul road route by the distance of the corresponding route and summing the results. As an alternative, the facility may calculate the VMT by multiplying the total number of trips taken by the longest haul road length.
(4) The twelve-month rolling total of total VMT.

C. The vehicle miles traveled by trucks associated with Building 21 Process Area shall be less than 27,000 per rolling 12 month period. The owner or operator shall determine and record the following for the Building 21 Process Area on a monthly basis:
   (1) All haul roads (material in and out, internal handling) used and the corresponding lengths.
   (2) The number of trips taken on each haul road route.
   (3) The total vehicle miles travelled (VMT). This shall be accomplished by multiplying the number of trips taken on each haul road route by the distance of the corresponding route and summing the results. As an alternative, the facility may calculate the VMT by multiplying the total number of trips taken by the longest haul road length.
   (4) The twelve-month rolling total of total VMT.

D. The haul roads covered under this permit are required to employ best management practices to reasonably prevent the discharge of fugitive dust from all haul roads beyond the lot line of the property on which it is located. These BMP are examples of reasonable practices to minimize the generation of fugitive dust emissions.

**BMP on haul roads include but are not limited to:**
- Limiting truck speed on facility property
- Watering and/or sweeping paved roadways
- Immediately cleaning-up or dampening all material spills on the roadways

(1) The owner or operator shall document all best management practices used at the facility to minimize fugitive dust emissions.

**Authority for Requirement:** DNR Construction Permit 18-A-362-S1

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

**Agency Approved Operation & Maintenance Plan Required?** 
Yes ☐ No ☒

**Facility Maintained Operation & Maintenance Plan Required?** 
Yes ☐ No ☒

**Compliance Assurance Monitoring (CAM) Plan Required?** 
Yes ☐ No ☒

**Authority for Requirement:** 567 IAC 22.108(3)
Emission Point ID Number:  HR-B28-B31

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP):  HR-B28-B31

Emission Unit vented through this Emission Point:  HR-B28-B31
Emission Unit Description:  Building 28 and 31 Haul Roads
Raw Material/Fuel:  Herbicide
Rated Capacity:  N/A

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant:  Fugitive Dust
Emission Limit:  No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement:  DNR Construction Permit 19-A-066  
567 IAC 23.3(2)"c"

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The maximum vehicle weight, including cargo, of the vehicles traveling the haul roads for Building 28 and 31 tank farms and loadouts for Bulk Transfer Operations shall not exceed the maximum vehicle weight in 23 CFR§658.17(b).
   (3) The facility shall keep a copy of 23 CFR§658.17(b).
   (4) If the maximum vehicle weight is increased in 23 CFR§658.17(b) or if 23 CFR§658.17(b) is rescinded, the facility has 30 days to request a modification of this permit.
B. The vehicle miles traveled by trucks used for Building 28 and 31 tank farms and the associated loadouts for Bulk Transfer Operations shall be less than 43,900 per rolling 12-
month period. The owner or operator shall determine and record the following for Buildings 28 and 31 Bulk Transfer Operations:

1. All road segments used and the corresponding lengths in miles, which includes all roads to bring materials in, internal handling, and transporting finished materials out.
2. The number of trips taken on each road segment transporting materials in and product out of the facility shall be recorded each day.
3. The number of trips taken on the internal road segments shall be calculated using the following method:
   i. Record the amount of material and volume of the mini bulk, in gallons, used each day.
   ii. Each month, calculate the number of mini bulks by dividing the volume of product by the volume of the mini bulk used. One mini bulk equals one round trip between internal buildings.
4. Each month, calculate the total vehicle miles traveled (VMT) by multiplying the number of trips taken on each road segment by the distance of the corresponding road segment and summing the results.
5. Calculate and record the twelve-month rolling total of total VMT in miles, monthly.

C. The haul roads covered under this permit are required to employ best management practices to reasonably prevent the discharge of fugitive dust from all haul roads beyond the lot line of the property on which it is located. These BMP are examples of reasonable practices to minimize the generation of fugitive dust emissions.

**BMP on haul roads include but are not limited to:**
   - Limiting truck speed on facility property
   - Watering and/or sweeping paved roadways
   - Immediately cleaning-up or dampening all material spills on the roadways

(1) The owner or operator shall document all best management practices used at the facility to minimize fugitive dust emissions.

Authority for Requirement: DNR Construction Permit 19-A-066

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: NF

Associated Equipment

<table>
<thead>
<tr>
<th>Emmission Unit</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shar Tank (EU TK-1401)</td>
<td>Final Baghouse (CE NF-1404-BH)</td>
<td>24,000 gal/day</td>
</tr>
<tr>
<td>Shar Tank – solids addition (EU TK-1401-BBS)</td>
<td>Shar Batching Baghouse (CE NF-1401-BH)</td>
<td>6,750 lb/hr</td>
</tr>
<tr>
<td>Aqueous Process Tank (EU TK-1402)</td>
<td>Final Baghouse (CE NF-1404-BH)</td>
<td>24,000 gal/day</td>
</tr>
<tr>
<td>Aqueous Process Tank – solids addition (EU TK-1402-BBS)</td>
<td>Aqueous Batching Baghouse (CE NF-1402-BH)</td>
<td>6,750 lb/hr</td>
</tr>
<tr>
<td>Holding Tank (EU TK-1403)</td>
<td>Final Baghouse (CE NF-1404-BH)</td>
<td>24,000 gal/day</td>
</tr>
<tr>
<td>Raw Materials Storage Tank (EU TK-1404)</td>
<td>Final Baghouse (CE NF-1404-BH)</td>
<td>24,000 gal/day</td>
</tr>
<tr>
<td>Check Tank (EU TK-1405)</td>
<td>Final Baghouse (CE NF-1404-BH)</td>
<td>24,000 gal/day</td>
</tr>
<tr>
<td>Pack Tank (EU TK-1406)</td>
<td>Final Baghouse (CE NF-1404-BH)</td>
<td>24,000 gal/day</td>
</tr>
<tr>
<td>Raw Materials Storage Tank (EU TK-1407)</td>
<td>Final Baghouse (CE NF-1404-BH)</td>
<td>24,000 gal/day</td>
</tr>
<tr>
<td>Kelzan Shar Tank (EU TK-1408)</td>
<td>Final Baghouse (CE NF-1404-BH)</td>
<td>24,000 gal/day</td>
</tr>
<tr>
<td>Kelzan Shar Tank – solids addition (EU TK-1408-BBS)</td>
<td>Kelzan Shar Batching Baghouse (CE NF-1403-BH)</td>
<td>6,750 lb/hr</td>
</tr>
<tr>
<td>NF Mill (EU NFMill)</td>
<td>None(1)</td>
<td>6,750 lb/hr</td>
</tr>
<tr>
<td>North Flow Bucket Elevator (EU NFBE)</td>
<td>Final Baghouse (CE NF-1404-BH)</td>
<td>6,750 lb/hr</td>
</tr>
<tr>
<td>Box Tank (EU NF-Box)</td>
<td>None(1)</td>
<td>24,000 gal/day</td>
</tr>
<tr>
<td>Packaging Reservoir (EU NF-Pack)</td>
<td>None(1)</td>
<td>24,000 gal/day</td>
</tr>
<tr>
<td>NF-Screener (EU NF-Screener)</td>
<td>None(1)</td>
<td>24,000 gal/day</td>
</tr>
<tr>
<td>Packaging (EU NF-Packaging)</td>
<td>None(1)</td>
<td>24,000 gal/day</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb/hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 12-A-496-S3

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM$_{2.5}$
Emission Limit(s): 0.86 lb/hr
Authority for Requirement: DNR Construction Permit 12-A-496-S3
Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.86 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 12-A-496-S3

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 27.5 tons/yr
Authority for Requirement: DNR Construction Permit 12-A-496-S3

Pollutant: Single Hazardous Air Pollutant
Emission Limit(s): 1.00 tons/yr
Authority for Requirement: DNR Construction Permit 12-A-496-S3

Pollutant: Total Hazardous Air Pollutants
Emission Limit(s): 16.00 tons/yr
Authority for Requirement: DNR Construction Permit 12-A-496-S3

Pollutant: Methanol
Emission Limit(s): 570 tons/yr
Authority for Requirement: DNR Construction Permit 12-A-496-S3

Pollutant: Triethylamine
Emission Limit(s): 5.70 tons/yr
Authority for Requirement: DNR Construction Permit 12-A-496-S3

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For all VOC containing materials used in this plant (North Flowable Liquids Plant), the owner or operator shall record and document the materials used.
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials processed, used, or generated, in the North Flowable Liquids Plant.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
(1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

D. The production rate of the North Flowable Liquids Plant shall not exceed 24,000 gallons per day.
   (1) The facility shall record the amount of product produced by North Flowable Liquids Plant, in gallons, on a daily basis.

E. The VOC vapor pressure of all North Flowable Plant materials off-loaded from rail cars or stored in bulk storage tanks shall be less than or equal to 0.05 psi.
   (1) The owner or operator shall record and document the maximum true vapor pressure for all North Flowable materials off-loaded from rail cars or stored in bulk storage tanks, in psi.

F. The VOC vapor molecular weight of all North Flowable Plant materials off-loaded from rail cars or stored in bulk storage tanks shall be less than or equal to 250 lb/lb-mol.
   (1) The owner or operator shall record and document the VOC vapor molecular weight for all North Flowable materials off-loaded from rail cars or stored in bulk storage tanks, in lb/lb-mol.

Control Equipment Requirements

G. All process and control equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the control and process equipment for this process.

H. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

I. The differential pressure drop across the Final Baghouse (CE NF-1404-BH) shall be maintained between 1.0 and 7.0 inches water column except during periods of filter replacement.
   (1) The owner or operator shall collect and record the pressure drop across Final Baghouse (CE NF-1404-BH), in inches of water, on a daily basis. If the pressure drop across the Final Baghouse (CE NF-1404-BH) falls outside the range specified above, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall also collect and record the pressure drop across all other baghouses associated with this permit, in inches of water, on a daily basis. If the pressure drop across any of these baghouses falls outside the range specified by the manufacture, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the process is not in operation.

Recordkeeping for the North Flowable Liquids Plant VOC and HAP Emission Caps
The following monitoring and recordkeeping requirements are used to show compliance with the VOC, Single HAP, methanol, triethylamine, and Total HAP emission limit caps in Condition 1 of this permit. The Single HAP emissions are defined as the emissions of any individual HAP emitted by the emission episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFF. The Total
HAP emissions are defined as the sum of all Single HAP emitted by the episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF.

The VOC emission limit covers the following emission episodes from the emission units covered under this permit for the production of products made in the North Flowable Liquids Plant:

Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Drum Heating
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Process Tank Cleaning Emissions
Floor Cleaning Emissions

The VOC emission limit covers emissions from the emission units listed in this permit, as well as a number of unpermitted units, including Drum Heating, Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions. In addition, this limit does not cover any emissions from storage tanks listed in this permit for the North Flowable Liquids Plant.

The HAP emission limits cover the following emission episodes from the emission units covered under this permit for the production of products made in the North Flowable Liquids Plant:

Displacement and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Process Tank Cleaning Emissions

This limit does not cover any emissions from storage tanks. Also, the limit only covers emissions from units that are part of the miscellaneous organic chemical manufacturing process unit (MCPU) for North Flowable Liquids Plant as defined in the subpart.

The facility must keep the following records to show compliance with the emission limit caps:

J. The facility shall document each product produced in the North Flowable Liquids Plant.
K. For each product produced in the North Flowable Liquids Plant, that uses a VOC-containing or HAP-containing material, the permittee shall determine and record the VOC, Single HAP, Methanol, Triethylamine, and Total HAP emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
(2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.

(3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition KG.5. The facility shall document and provide a justification for the value for each input used.

(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC, Single HAP, methanol, triethylamine, and Total HAP emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.
e. empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC, Single HAP, methanol, triethylamine, and Total HAP emission rate (tons/batch) by summing the emission rate of each emission episode.

L. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition KG.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

M. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC, Single HAP, methanol, triethylamine, and Total HAP ton per year emission limit caps in the emission limit section of this permit:

(1) The identification of each VOC-containing or HAP-containing material processed, used, or generated; as required to calculate the VOC and HAP emissions for the emission limit caps.

(2) The daily number of standard or nonstandard batches completed for each product produced.

N. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

O. If the 12-month rolling total of the VOC emissions exceeds 20.0 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 20.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 20.0 tons, daily recordkeeping will be required per this Condition of this permit.

P. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit:
(1) The number of standard and nonstandard batches completed for each product produced and the corresponding Single HAP emissions, in tons.
(2) The total amount of Single HAP emissions for each product produced, in tons.
(3) The total amount of Single HAP emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of Single HAP emissions from all products produced, in tons.

Q. If the 12-month rolling total of the Single HAP emissions exceeds 0.75 tons from all emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
(1) The number of standard and nonstandard batches and the corresponding Single HAP emissions, for each product produced, in tons.
(2) The total amount of Single HAP emissions for each product produced, in tons.
(3) The total amount of Single HAP emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of Single HAP emissions from all products produced, in tons.

Daily calculations for Single HAP emissions shall continue until the 365-day rolling total of the amount of Single HAP emissions from all emission units covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit drops below 0.75 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Single HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 0.75 tons, daily recordkeeping will be required per this Condition of this permit.

R. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the methanol ton per year emission limit cap in the emission limit section of this permit:
(1) The number of standard and nonstandard batches completed for each product produced and the corresponding methanol emissions, in tons.
(2) The total amount of methanol emissions for each product produced, in tons.
(3) The total amount of methanol emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of methanol emissions from all products produced, in tons.

S. If the 12-month rolling total of the methanol emissions exceeds 4.25 tons from all emission units/episodes covered by the methanol ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
(1) The number of standard and nonstandard batches and the corresponding methanol emissions, for each product produced, in tons.
(2) The total amount of methanol emissions for each product produced, in tons.
(3) The total amount of methanol emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of methanol emissions from all products produced, in tons.

Daily calculations for methanol emissions shall continue until the 365-day rolling total of the amount of methanol emissions from all emission units covered by the methanol ton per year emission limit cap in the emission limit section of this permit drops below 4.25 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of methanol emissions will cease per this Condition of this permit. If the emissions once again exceed 4.25 tons, daily recordkeeping will be required per this Condition of this permit.

T. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the triethylamine ton per year emission limit cap in the emission limit section of this permit:
(1) The number of standard and nonstandard batches completed for each product produced and the corresponding triethylamine, in tons.
(2) The total amount of triethylamine emissions for each product produced, in tons.
(3) The total amount of triethylamine emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of triethylamine emissions from all products produced, in tons.

U. If the 12-month rolling total of the triethylamine emissions exceeds 6.0 tons from all emission units/episodes covered by the triethylamine ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
(1) The number of standard and nonstandard batches and the corresponding triethylamine emissions, for each product produced, in tons.
(2) The total amount of triethylamine emissions for each product produced, in tons.
(3) The total amount of triethylamine emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of triethylamine emissions from all products produced, in tons.
Daily calculations for triethylamine emissions shall continue until the 365-day rolling total of the amount of triethylamine emissions from all emission units covered by the triethylamine ton per year emission limit cap in the emission limit section of this permit drops below 6.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of triethylamine emissions will cease per this Condition of this permit. If the emissions once again exceed 6.0 tons, daily recordkeeping will be required per this Condition of this permit.

V. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding Total HAP emissions, in tons.
   (2) The total amount of Total HAP emissions for each product produced, in tons.
   (3) The total amount of Total HAP emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of Total HAP emissions from all products produced, in tons.

W. If the 12-month rolling total of the Total HAP emissions exceeds 12.0 tons from all emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding Total HAP emissions, for each product produced, in tons.
   (2) The total amount of Total HAP emissions for each product produced, in tons.
   (3) The total amount of Total HAP emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of Total HAP emissions from all products produced, in tons.

Daily calculations for Total HAP emissions shall continue until the 365-day rolling total of the amount of Total HAP emissions from all emission units covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit drops below 12.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Total HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 12.0 tons, daily recordkeeping will be required per this Condition of this permit.

NSPS and NESHAP Requirements

X. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

Y. All batch process vents that are part of the miscellaneous organic chemical process unit for the North Flowable Liquids Plant shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.
(1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the North Flowable Liquids Plant, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the North Flowable Liquids Plant) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

(3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525 (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
   a. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
   b. A record of whether each batch operated was considered a standard batch.
   c. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
   d. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

Z. Any continuous process vents that are part of the miscellaneous organic chemical process unit for the North Flowable Liquids Plant shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the North Flowable Liquids Plant, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2455 (b), for each continuous process vent in the North Flowable Liquids Plant, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).

AA. The material stored in the storage tanks that are part of the miscellaneous organic chemical process unit for the North Flowable Liquids Plant with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the group status for the storage tanks that are part of the miscellaneous organic chemical process unit for the North Flowable Liquids Plant, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

BB. The facility shall load less than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in 63.111, greater than or equal to 1.5 pounds per square inch absolute in the transfer racks that are part of the miscellaneous organic chemical process unit for the North Flowable Liquids Plant, as specified for Group 2 Transfer Rack, in 40 CFR Part 63 Subpart FFFF, 63.2550.
(1) The owner or operator shall determine and document the group status for the transfer racks that are part of the miscellaneous organic chemical process unit for the North Flowable Liquids Plant, as defined in 40 CFR Part 63 Subpart FFFF, 63.2550.

CC. Any wastewater streams that are part of the miscellaneous organic chemical process unit for the North Flowable Liquids Plant shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.

(1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

DD. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

EE. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the North Flowable Liquids Plant.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 12-A-496-S3

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 12-A-496-S3

40 CFR 63 Subpart FFFF

567 IAC 23.1(4)"cf"
Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 59
Stack Opening, (inches, dia.): 32 X 43
Exhaust Flow Rate (scfm): 4,000
Exhaust Temperature (°F): 82
Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 12-A-496-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☑
Facility Maintained Operation & Maintenance Plan Required? Yes ☑ No ☐
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☑

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number:** NF-EL

**Associated Equipment**

**Associated Emission Unit ID Numbers** (if multiple units vent thru this EP): NF-EL

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**Emission Unit vented through this Emission Point:** NF-EL
**Emission Unit Description:** Equipment Leaks for North Flowable Liquid Plant
**Raw Material/Fuel:** Herbicide
**Rated Capacity:** N/A

**Applicable Requirements**

**Emission Limits (lb/hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

None at this time.

**Authority for Requirement:** DNR Construction Permit 17-A-249

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment for the North Flowable Liquid Plant shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For each product produced in the North Flowable Liquid Plant, the owner or operator shall identify and document each VOC-containing or HAP-containing material used.
   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials used in the North Flowable Liquid Plant.

C. The facility shall identify and document each component used for the North Flowable Liquids Plant. Components include, but are not limited to, valves, pumps, connectors, compressor seals, pressure relief valves, open-ended lines, sample connections, agitators, etc. For each component, the facility shall document:
   (1) whether it is in light liquid" or "heavy liquid" service. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy
liquid service" found in NSPS 40 CFR Part 60 Subpart V Va, §60.481a, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures;
(2) the type of component (liquid valve, liquid pump, etc.);
(3) the percent by weight HAP, for all light liquid used in the equipment for the North Flowable Liquids Plant;
(4) the percent by weight methanol for all liquids used in the equipment for the North Flowable Liquids Plant;
(5) the percent by weight triethylamine for all liquids used in the equipment for the North Flowable Liquids Plant.

D. The facility shall document the total number of each type of component (liquid valve, liquid pump, etc.) used in the North Flowable Liquid Plant.

E. The company shall modify the component lists in Condition 5.C or 5.D whenever changes are made to the equipment in North Flowable Liquids Plant.

F. The North Flowable Liquid Plant shall have a maximum of 121 liquid valves, 15 liquid pumps, 880 connectors, 3 open-ended lines, 8 sample connections, and 7 agitators; and no gas valves, compressors, open-ended lines, agitators or pressure relief valves.

G. The maximum HAP content of any material used in the equipment for the North Flowable Liquids Plant that is in light liquid service shall be 65.0%, by weight.

H. The maximum methanol content of any material used in the equipment for the North Flowable Liquids Plant shall be 13.0%, by weight.

I. The maximum triethylamine content of any material used in the equipment for the North Flowable Liquids Plant shall be 13.0%, by weight.

**NESHAP Subpart FFFF Requirements**

J. The facility shall analyze any changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the North Flowable Liquid Plant.
   (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

K. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

L. Upon the compliance date for 40 CFR Part 63 Subpart FFFF, the owner or operator shall meet each requirement in 40 CFR Part §63.2480 (Table 6) that applies to the equipment in North Flowable Liquid Plant.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

Authority for Requirement: DNR Construction Permit 17-A-249
**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 17-A-249
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)“cf”

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: SD1

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas Heater (EU-SD1-a)</td>
<td>Product Cyclone (CE Cyclone)</td>
<td>2.6 MMBTU/hr</td>
</tr>
<tr>
<td>Bag Dump Station/Loss in Weight Feeder (EU-SD1-b)</td>
<td>NA(1)</td>
<td>1,500 lbs of solids/hr</td>
</tr>
<tr>
<td>Direct Fired Spray Dryer (EU-SD1-c)</td>
<td>Product Cyclone (CE Cyclone)</td>
<td>1,200 lbs of herbicide/hr</td>
</tr>
<tr>
<td>Screener (EU-SD1-e)</td>
<td>NA(1)</td>
<td>1,200 lbs of herbicide/hr</td>
</tr>
<tr>
<td>Super Sack Bag Filler (EU-SD1-f)</td>
<td>NA(1)</td>
<td>1,200 lbs of herbicide/hr</td>
</tr>
<tr>
<td>Loading Off-Spec Drum (EU-SD1-g)</td>
<td>NA(1)</td>
<td>1,200 lbs of herbicide/hr</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 13-A-314-S2

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM2.5
Emission Limit(s): 0.40 lb/hr
Authority for Requirement: DNR Construction Permit 13-A-314-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.40 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 13-A-314-S2

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 3.83 lb/hr
Authority for Requirement: DNR Construction Permit 13-A-314-S2
**Operating Requirements with Associated Monitoring and Recordkeeping**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process and control equipment for SD1 shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The facility shall only combust natural gas or propane in the Natural Gas Heater (EU SD1-a).

C. The facility shall not process any materials with Hazardous Air Pollutants (HAP) in the Direct Fired Spray Dryer (EU SD1-c).

D. The average hourly production rate of this plant (SD1) shall not exceed 1,200 pounds per hour (lbs/hr, dry weight) calculated on a daily basis.
   (2) The facility shall calculate and record the average hourly production rate (lbs/hr) of this plant (SD1):
      (a) The facility shall record the amount of product produced by SD1, in pounds, on a daily basis;
      (b) The facility shall record the hours of operation for SD1, on a daily basis. The hours of operation for the process is defined as the amount of time that the Final Baghouse (CE Final Baghouse) operates;
      (c) The facility shall calculate and record on a daily basis the average hourly production rate (lbs/hr) for SD1 based on the daily amount of product produced and daily hours of operation.

E. As specified in Section 2, VOC testing shall be conducted under worst case conditions that are expected to result in the highest VOC emission rate. If process changes are made that result in a new worst case condition that could reasonably be expected to increase VOC emissions, the facility shall perform emissions testing within 90 days of the change or request a determination from the IDNR.
   (1) The facility shall document all products made and the corresponding operating scenarios.
   (2) For each operating scenario, the facility shall calculate the VOC emissions, based on the methods used in the application for project 16-305 or other IDNR approved methods. The facility shall document all information used to perform the calculation, including, but not limited to: calculation methods, emission episodes, materials used, process temperatures, and process pressures.
   (3) The facility shall document the worst case condition for VOC emissions. This will include the product made, the corresponding operating scenario, and the VOC emissions rate.
(4) The facility shall document the date of the tests performed for each worst case condition for VOC emissions and the results of those tests.

(5) The facility shall document the date of any process changes that result in a new operating scenario. For each of these changes, the facility shall document the product made and the operating scenario and the corresponding emission estimates and information, as specified in conditions (1) and (2) above. If a new operating scenario results in a new worst case scenario with a possible emission increase for VOC emissions, the facility shall perform emissions testing for VOC within 90 days of the change or request a determination from the IDNR. The facility shall also document these actions upon completion.

F. For each product produced in the SD1 plant, the owner or operator shall identify and document each VOC and HAP containing material used or produced.

G. The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials used or produced in the SD1 process.

H. The facility is limited to operating SD1 a maximum of 7,100 hours per rolling 12-month period.

   (1) The owner or operator shall record on a monthly basis, the number of hours that SD1 operated, and the rolling 12-month total amount of hours that EU-SD1 operated.

Control Equipment Requirements

I. All process and control equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.

   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the control and process equipment for this process.

J. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

K. The differential pressure drop across the Final Baghouse (CE Final Baghouse) shall be maintained between 1.0 and 7.0 inches water column except during periods of filter replacement.

   (1) The owner or operator shall collect and record the pressure drop across Final Baghouse (CE Final Baghouse), in inches of water, on a continuous basis. If the pressure drop across the Final Baghouse (CE Final Baghouse) falls outside the range specified above, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall also collect and record the pressure drop across all other control equipment associated with this permit, in inches of water, on a daily basis. If the pressure drop across any of these control devices falls outside the range specified by the manufacture, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the process is not in operation.

NSPS or NESHAP Requirements
L. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

M. The facility shall analyze any changes in formulations and determine if there is a change in applicability for any NSPS or NESHAP subparts for SD1.
   (1) The facility shall document the results of any NSPS or NESHAP determinations as required above.

Authority for Requirement: DNR Construction Permit 13-A-314-S2

**NSPS and NESHAP Applicability**
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 13-A-314-S2
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 62
Stack Opening, (inches, dia.): 18
Exhaust Flow Rate (scfm): 6,000
Exhaust Temperature (°F): 220
Discharge Style: Unobstructed Vertical

Authority for Requirement: DNR Construction Permit 13-A-314-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: SF-BH1

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): SF-BBU-93
Emissions Control Equipment ID Number: CESF-BH1
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: SF-BBU-93
Emission Unit Description: South Flowable Batching Station
Raw Material/Fuel: Herbicide
Rated Capacity: 3,000 lbs/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 17-A-103

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}
Emission Limit(s): 0.05 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-103

Pollutant: PM_{10}
Emission Limit(s): 0.05 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-103

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.05 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 17-A-103

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 25 tons/yr(2)
Authority for Requirement: DNR Construction Permit 17-A-103
Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 21 tons/yr
Authority for Requirement: DNR Construction Permit 17-A-103

(2) Emission limits apply to the 4L and South Flowable (SF) processing lines. This limit applies to the following emission points: EP4L-BH1(i), EPSF –BH1(i), EPSF –BH2(i), EPSF –Vent1(i), EP-B17TF-East(ii), EP-B17TF-West(ii), EPB17-LO(ii), EPB11-LO(ii), EP-B13TF-1(ii), EPB13-LO(ii), and those covered under the 4L Process Line CAP permit(i) and the Building 11 Storage Tanks CAP permit(ii). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L and South Flowable (SF) processing lines.

v. The VOC emission limit only applies to emissions from equipment associated with the production of products produced in the 4L and SF processing lines. This limit does not apply when the equipment is handling materials for the co-production of products in the 4L or SF and EC44 processing lines.

vi. The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the 4L and South Flowable (SF) processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.

(3) Emission limits apply to emissions from the production of products co-produced in the 4L or SF and EC44 processing lines. This limit applies to the following emission points when products are co-produced in the 4L or SF and EC44 processing lines: EP-EC44(i), EP4L-BH1(i), EPSF –BH1(i), EPSF –BH2(i), EPSF –Vent1(i), EP-B17TF-East(ii), EP-B17TF-West(ii), EPB17-LO(ii), EPB11-LO(ii), EP-B13TF-1(ii), EPB13-LO(ii), and those covered under the 4L Process Line CAP permit(i) and the Building 11 Storage Tanks CAP permit(ii). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L or SF and EC44 co-production processing line.

v) The VOC emission limit only applies to emissions from equipment associated with the production of products co-produced in the 4L or SF and EC44 processing lines for emission point EP-EC44. This limit does not apply when the equipment is handling materials for the production of products not co-produced in the 4L or SF and EC44 processing lines.

vi) The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the production of products co-produced in the 4L or SF and EC44 processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements
A. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

B. All process and control equipment for the SF processing line shall be operated and maintained according to manufacturer specifications and maintenance schedule.
(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

C. The permittee shall employ good housekeeping practices for the SF processing line. Cleanup of liquid spills shall be initiated promptly upon discovery.

Recordkeeping for the 4L and SF VOC Emission Cap
The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission limit cap (25.0 tpy) in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products made in the 4L and South Flowable (SF) processing lines:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Gas Sweep
- Solids Handling
- Evaporation from Screens and Tank Evaporation
- Heating
- Bulk Storage Tank Emissions
- Ancillary Packaging Emissions - Ink Jet & Stenciling
- Laboratory Emissions
- Tank Cleaning Emissions
- Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

D. The facility shall document each product produced in the 4L or SF processing line. The facility shall also document whether the product is produced alone in the 4L or SF processing line or co-produced with the EC44.

E. For each product produced in the 4L or SF processing line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughput, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition F&D.5. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.
The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

F. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.

   (1) The permittee shall use the operating scenarios required in Condition FD.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

G. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

   (1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
   (2) The daily number of standard or nonstandard batches completed for each product produced.

H. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

I. If the 12-month rolling total of the VOC emissions exceeds 19.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 19.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 19.0 tons, daily recordkeeping will be required per this section of this permit.

Recordkeeping for the 4Lor SF and EC44 VOC Emission Cap
The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission (21.0 tpy) limit cap in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products co-produced in the 4L or SF and EC44 processing lines:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Gas Sweep
- Solids Handling
- Evaporation from Screens and Tank Evaporation
- Heating
- Bulk Storage Tank Emissions
- Ancillary Packaging Emissions - Ink Jet & Stenciling
- Laboratory Emissions
- Tank Cleaning Emissions
- Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

**J.** The facility shall document each product produced in the EC44 processing line. The facility shall also document whether the product is produced in the EC44 processing line or co-produced with the 4L or SF processing lines.

**K.** For each product co-produced in the EC44 processing line with the 4L or SF processing lines, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

1. The permittee shall identify and document each product produced.
2. The permittee shall identify and document each standard and nonstandard batch used to produce each product.
3. The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using the equations listed below in Condition L.5. The facility shall document and provide a justification for the value for each input used.
4. The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
5. The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau,
during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.
L. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.
   (1) The permittee shall use the operating scenarios required in Condition L-D.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

M. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
   (2) The daily number of standard or nonstandard batches completed for each product produced.

N. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

O. If the 12-month rolling total of the VOC emissions exceeds 17.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 17.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 17.0 tons, daily recordkeeping will be required per this section of this permit.

NSPS or NESHAP Requirements

P. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.
Q. Upon and after the compliance date for 40 CFR Part 63 Subpart FFFF, all batch process vents that are part of the miscellaneous organic chemical process unit for the SF processing line shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the SF processing line, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the SF processing line) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

(3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525(e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
   a. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
   b. A record of whether each batch operated was considered a standard batch.
   c. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
   d. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

R. Upon the compliance date for 40 CFR Part 63 Subpart FFFF, any continuous process vents that are part of the miscellaneous organic chemical process unit for the SF processing line shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the SF processing line, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2455 (b), for each continuous process vent in the SF processing line, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).

S. Upon the compliance date for 40 CFR Part 63 Subpart FFFF, any wastewater streams that are part of the miscellaneous organic chemical process unit for the SF processing line shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.

(1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

T. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified.
in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

U. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the SF processing line.

  (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 17-A-103

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 17-A-103
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

**Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): Vents Indoors
Stack Opening, (inches, dia.): Vents Indoors
Exhaust Flow Rate (scfm): 1,200
Exhaust Temperature (°F): 70
Discharge Style: Vents Indoors

Authority for Requirement: DNR Construction Permit 17-A-103

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?  Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required?  Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required?  Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement:  567 IAC 22.108(3)
**Emission Point ID Number:** SF-BH2

**Associated Equipment**

**Associated Emission Unit ID Numbers** (if multiple units vent thru this EP): SF-BBU-127

Emissions Control Equipment ID Number: CESF-BH2

Emissions Control Equipment Description: Baghouse

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Emission Unit vented through this Emission Point: SF-BBU-127

Emission Unit Description: South Flowable Batching Station

Raw Material/Fuel: Herbicide

Rated Capacity: 3,000 lbs/hr

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**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% (1)

Authority for Requirement: 567 IAC 23.3(2)"d"

DNR Construction Permit 17-A-104

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM$_{2.5}$

Emission Limit(s): 0.05 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-104

Pollutant: PM$_{10}$

Emission Limit(s): 0.05lb/hr

Authority for Requirement: DNR Construction Permit 17-A-104

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.05 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

DNR Construction Permit 17-A-104

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 25 tons/yr(2)

Authority for Requirement: DNR Construction Permit 17-A-104
Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 21 tons/yr(3)
Authority for Requirement: DNR Construction Permit 17-A-104

(2) Emission limits apply to the 4L and South Flowable (SF) processing lines. This limit applies to the following emission points: EP4L-BH1(i), EPSF-BH1(i), EPSF-BH2(i), EPSF-Vent1(i), EP-B17TF-East(ii), EP-B17TF-West(ii), EPB17-LO(ii), EPB11-LO(ii), EP-B13TF-1(i), EPB13-LO(ii), and those covered under the 4L Process Line CAP permit(i) and the Building 11 Storage Tanks CAP permit(ii). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L and South Flowable (SF) processing lines.

vii. The VOC emission limit only applies to emissions from equipment associated with the production of products produced in the 4L and SF processing lines. This limit does not apply when the equipment is handling materials for the co-production of products in the 4L or SF and EC44 processing lines.

viii. The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the 4L and South Flowable (SF) processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.

(3) Emission limits apply to emissions from the production of products co-produced in the 4L or SF and EC44 processing lines. This limit applies to the following emission points when products are co-produced in the 4L or SF and EC44 processing lines: EP-EC44(i), EP4L-BH1(i), EPSF-BH1(i), EPSF-BH2(i), EPSF-Vent1(i), EP-B17TF-East(ii), EP-B17TF-West(ii), EPB17-LO(iii), EPB11-LO(iii), EP-B13TF-1(ii), EPB13-LO(iii), and those covered under the 4L Process Line CAP permit(i) and the Building 11 Storage Tanks CAP permit(ii). The limit also applies to any associated VOC emissions from the Laboratory, Tank Cleaning, Floor Cleaning, and Packaging for the 4L or SF and EC44 co-production processing line.

vii) The VOC emission limit only applies to emissions from equipment associated with the production of products co-produced in the 4L or SF and EC44 processing lines for emission point EP-EC44. This limit does not apply when the equipment is handling materials for the production of products not co-produced in the 4L or SF and EC44 processing lines.

viii) The VOC emission limit only applies to emissions from equipment associated with the storage and loadout of materials from or for the production of products co-produced in the 4L or SF and EC44 processing lines for the listed emission points. This limit does not apply when the equipment is handling materials originating from other sources.

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements
A. The owner or operator shall operate the control equipment at all times when emissions are vented to them.
B. All process and control equipment for the SF processing line shall be operated and maintained according to manufacturer specifications and maintenance schedule.
(1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

C. The permittee shall employ good housekeeping practices for the SF processing line. Cleanup of liquid spills shall be initiated promptly upon discovery.

Recordkeeping for the 4L and SF VOC Emission Cap
The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission limit cap (25.0 tpy) in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products made in the 4L and South Flowable (SF) processing lines:

Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Bulk Storage Tank Emissions
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

D. The facility shall document each product produced in the 4L or SF processing line. The facility shall also document whether the product is produced alone in the 4L or SF processing line or co-produced with the EC44.

E. For each product produced in the 4L or SF processing line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.
   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition F sophistications. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
(5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.
The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

F. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition F.D.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

G. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.

H. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

I. If the 12-month rolling total of the VOC emissions exceeds 19.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 19.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 19.0 tons, daily recordkeeping will be required per this section of this permit.

Recordkeeping for the 4Lor SF and EC44 VOC Emission Cap
The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission (21.0 tpy) limit cap in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products co-produced in the 4L or SF and EC44 processing lines:

Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Bulk Storage Tank Emissions
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

J. The facility shall document each product produced in the EC44 processing line. The facility shall also document whether the product is produced in the EC44 processing line or co-produced with the 4L or SF processing lines.

K. For each product co-produced in the EC44 processing line with the 4L or SF processing lines, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition L.5. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
   (5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau,
during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.
L. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.
   (1) The permittee shall use the operating scenarios required in Condition L-D.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

M. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
   (2) The daily number of standard or nonstandard batches completed for each product produced.

N. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

O. If the 12-month rolling total of the VOC emissions exceeds 17.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 17.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 17.0 tons, daily recordkeeping will be required per this section of this permit.

**NSPS or NESHAP Requirements**

P. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.
Q. Upon and after the compliance date for 40 CFR Part 63 Subpart FFFF, all batch process vents that are part of the miscellaneous organic chemical process unit for the SF processing line shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the SF processing line, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (the SF processing line) using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through (7).

(3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs § 63.2525s (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
   a. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
   b. A record of whether each batch operated was considered a standard batch.
   c. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
   d. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

R. Upon the compliance date for 40 CFR Part 63 Subpart FFFF, any continuous process vents that are part of the miscellaneous organic chemical process unit for the SF processing line shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the SF processing line, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2455 (b), for each continuous process vent in the SF processing line, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in § 63.115(d), except as specified in paragraphs § 63.2455 (b)(1) through (3).

S. Upon the compliance date for 40 CFR Part 63 Subpart FFFF, any wastewater streams that are part of the miscellaneous organic chemical process unit for the SF processing line shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.

(1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

T. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified
in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

U. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the SF processing line.

(1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 17-A-103

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 17-A-104

40 CFR 63 Subpart FFFF

567 IAC 23.1(4)"cf"

**Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): Vents Indoors
- Stack Opening, (inches, dia.): Vents Indoors
- Exhaust Flow Rate (scfm): 1,200
- Exhaust Temperature (°F): 70
- Discharge Style: Vents Indoors

Authority for Requirement: DNR Construction Permit 17-A-104

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☑
- **Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☑
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☐ No ☑

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number: SF-EL**

**Associated Equipment**

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): SF-EL

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Emission Unit vented through this Emission Point: SF-EL

Emission Unit Description: Equipment Leaks for the SF Processing Lines

Raw Material/Fuel: Herbicide

Rated Capacity: N/A

**Applicable Requirements**

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Authority for Requirement: DNR Construction Permit 17-A-209

**Operating Requirements with Associated Monitoring and Recordkeeping**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment for the SF processing line shall be operated and maintained according to manufacturer specifications and maintenance schedule.

   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. For each product produced in the SF processing line, the owner or operator shall identify and document each VOC-containing material used.

   (1) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials used in the SF processing line.

C. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.

D. The equipment used in the SF processing line shall have a maximum of 117 heavy liquid valves, 10 heavy liquid pumps, 503 connectors, and 6 heavy liquid sample connections. The process shall not use any light liquid components, gas valves, compressors, open-
ended lines, agitators, or pressure relief valves. This shall include all of the equipment used in the SF processing line.

(1) The owner or operator shall count and document the number and types of components used in the SF processing line. Components include but are not limited to valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquid" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NSPS 40 CFR Part 60 Subpart VVa, §60.481a, except that, if standard reference text or ASTM D2879-83, 96, or 97 data is unavailable, engineering judgment can be used to determine the vapor pressures.

(2) The company shall modify the component count whenever the number of components change.

**NESHAP Subpart FFFF Requirements**

E. The facility shall analyze any changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the SF processing line.

   (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

F. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

Authority for Requirement: DNR Construction Permit 17-A-209

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 17-A-209

40 CFR 63 Subpart FFFF

567 IAC 23.1(4)"cf"

**Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: SF-Vent1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF Tank 88 (EUSF-TK88)</td>
<td>None</td>
<td>10,000 gallons</td>
</tr>
<tr>
<td>SF Tank 89 (EUSF-TK89)</td>
<td>None</td>
<td>10,000 gallons</td>
</tr>
<tr>
<td>SF Tank 90 (EUSF-TK90)</td>
<td>None</td>
<td>12,000 gallons</td>
</tr>
<tr>
<td>SF Tank 91 PK4 (EUSF-TK91)</td>
<td>None</td>
<td>6,000 gallons</td>
</tr>
<tr>
<td>SF Tank 92 GR1 (EUSF-TK92)</td>
<td>None</td>
<td>6,000 gallons</td>
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<tr>
<td>SF Tank 93 GR1 (EUSF-TK93)</td>
<td>None</td>
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</tr>
<tr>
<td>SF Tank 127 (EUSF-TK127)</td>
<td>None</td>
<td>3,000 gallons</td>
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<tr>
<td>SF Tank 128 (EUSF-TK128)</td>
<td>None</td>
<td>2,000 gallons</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 17-A-105

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 17-A-105

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 25 tons/yr
Authority for Requirement: DNR Construction Permit 17-A-105

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 21 tons/yr
Authority for Requirement: DNR Construction Permit 17-A-105

(2) Emission limits apply to the 4L and South Flowable (SF) processing lines. This limit applies to the following emission points: EP4L-BH1(i), EPSF-BH1(i), EPSF-BH2(i), EPSF-Vent1(i), EP-B17TF-East(i),
Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements

A. All process equipment for the SF processing line shall be operated and maintained according to manufacturer specifications and maintenance schedule.

   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The permittee shall employ good housekeeping practices for the SF processing line. Cleanup of liquid spills shall be initiated promptly upon discovery.
Recordkeeping for the 4L and SF VOC Emission Cap

The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission limit cap (25.0 tpy) in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products made in the 4L and South Flowable (SF) processing lines:

- Displacement, Packaging, and Bulk Loadout (Filling)
- Gas Sweep
- Solids Handling
- Evaporation from Screens and Tank Evaporation
- Heating
- Bulk Storage Tank Emissions
- Ancillary Packaging Emissions - Ink Jet & Stenciling
- Laboratory Emissions
- Tank Cleaning Emissions
- Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

C. The facility shall document each product produced in the 4L or SF processing line. The facility shall also document whether the product is produced alone in the 4L or SF processing line or co-produced with the EC44.

D. For each product produced in the 4L or SF processing line, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

1. The permittee shall identify and document each product produced.
2. The permittee shall identify and document each standard and nonstandard batch used to produce each product.
3. The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition E9.5. The facility shall document and provide a justification for the value for each input used.
4. The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
5. The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau.
during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.
E. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.
   (1) The permittee shall use the operating scenarios required in Condition ED.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

F. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.
   (2) The daily number of standard or nonstandard batches completed for each product produced.

G. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

H. If the 12-month rolling total of the VOC emissions exceeds 19.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
   (2) The total amount of VOC emissions for each product produced, in tons.
   (3) The total amount of VOC emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 19.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 19.0 tons, daily recordkeeping will be required per this section of this permit.

Recordkeeping for the 4Lor SF and EC44 VOC Emission Cap
The following monitoring and recordkeeping requirements are used to show compliance with the VOC ton per year emission (21.0 tpy) limit cap in the emission limit section of this permit. These requirements pertain to the following emission episodes for the production of products co-produced in the 4L or SF and EC44 processing lines:

Displacement, Packaging, and Bulk Loadout (Filling)
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Bulk Storage Tank Emissions
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The VOC emission limit covers all of the emissions from the emission units and emission episodes in this permit as well as the emission episodes in the other permits that contain the VOC ton per year emission limit cap, as well as a number of unpermitted units, including Ancillary Packaging Emissions - Ink Jet & Stenciling, Laboratory Emissions, and Tank and Floor Cleaning Emissions.

I. The facility shall document each product produced in the EC44 processing line. The facility shall also document whether the product is produced in the EC44 processing line or co-produced with the 4L or SF processing lines.

J. For each product co-produced in the EC44 processing line with the 4L or SF processing lines, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

   (1) The permittee shall identify and document each product produced.
   (2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   (3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition K\(\Phi\).5. The facility shall document and provide a justification for the value for each input used.
   (4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.
   (5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

   a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16,
Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

6. The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

7. For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC emission rate (tons per batch) by summing the emission rate of each emission episode.

K. The permittee shall record each batch completed and whether it is a standard or nonstandard batch.

1. The permittee shall use the operating scenarios required in Condition K.D.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

L. The permittee shall maintain the following daily records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:
(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.

M. The permittee shall maintain the following monthly records for all of the emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

N. If the 12-month rolling total of the VOC emissions exceeds 17.0 tons from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 17.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this section of this permit. If the emissions once again exceed 17.0 tons, daily recordkeeping will be required per this section of this permit.

NSPS or NESHAP Requirements

O. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

P. Upon and after the compliance date for 40 CFR Part 63 Subpart FFFF, all batch process vents that are part of the miscellaneous organic chemical process unit for the SF processing line shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the SF processing line, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

(2) As specified in § 63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the
uncontrolled organic HAP emissions from each of the batch process vents within
the process (the SF processing line) using the procedures specified in §
63.1257(d)(2)(i) and (ii), except as specified in paragraphs § 63.2460 (b)(1) through
(7).

(3) As specified in § 63.2525(e)(4), unless one of the conditions specified in paragraphs
§ 63.2525s (e)(1) through e(3) is met, the owner or operator must keep records of
the information specified in paragraphs (e)(4)(i) through (iv), as applicable:
   a. A record of the day each batch was completed and/or the operating hours per
day for continuous operations with hydrogen halide and halogen emissions.
   b. A record of whether each batch operated was considered a standard batch.
   c. The estimated uncontrolled and controlled emissions for each batch that is
considered to be a nonstandard batch.
   d. Records of the daily 365-day rolling summations of emissions, or alternative
records that correlate to the emissions (e.g., number of batches), calculated
no less frequently than monthly.

Q. Upon the compliance date for 40 CFR Part 63 Subpart FFFF, any continuous process vents
that are part of the miscellaneous organic chemical process unit for the SF processing line
shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart
FFFF, 63.2550.

   (1) The owner or operator shall identify and determine and document the type
(continuous or batch) and group status for all process vents associated with the SF
processing line, according to 40 CFR Part 63 Subpart FFFF, 63.2550.

   (2) As specified in § 63.2455 (b), for each continuous process vent in the SF processing
line, the facility shall determine and document the total resource effectiveness
(TRE) index value, as specified in § 63.115(d), except as specified in paragraphs §
63.2455 (b)(1) through (3).

R. After the compliance date for 40 CFR Part 63 Subpart FFFF, the material stored in the
storage tanks that are part of the miscellaneous organic chemical process unit for the 4L
processing line with a capacity greater than or equal to 10,000 gallons, shall have a
maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as
specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.

   (1) After the compliance date for 40 CFR Part 63 Subpart FFFF, the owner or operator
shall determine and document the group status for the storage tanks that are part of
the miscellaneous organic chemical process unit for the SF processing line, as
specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

S. Upon the compliance date for 40 CFR Part 63 Subpart FFFF, any wastewater streams that
are part of the miscellaneous organic chemical process unit for the SF processing line shall
operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF,
63.2485 and the requirements referenced therein.

   (1) The owner or operator shall meet all of the applicable reporting and recordkeeping
requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525,
and the requirements referenced therein, including applicable requirements
specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

T. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission
point after the compliance date, the owner or operator must comply with the Group 1
requirements beginning on the date the switch occurs and provide notification as specified
in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

U. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the SF processing line.

   (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement:    DNR Construction Permit 17-A-209

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:    DNR Construction Permit 17-A-105
                                      40 CFR 63 Subpart FFFF
                                      567 IAC 23.1(4)"cf"

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground):  1.75
Stack Opening, (inches, dia.):  6
Exhaust Flow Rate (scfm):  Displacement
Exhaust Temperature (°F):  70
Discharge Style:  Downward
Authority for Requirement:    DNR Construction Permit 17-A-105

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
**Monitoring Requirements**  
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Approved Operation &amp; Maintenance Plan Required?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Authority for Requirement: 567 IAC 22.108(3)
### Emission Point ID Number: Formulation Test Plant

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drum Weigh Station (EU DC 3251)</td>
<td>Dryer Baghouse (CE DC 3225)</td>
<td>400 lb/hr</td>
</tr>
<tr>
<td>Drum Dumper (EU DC 3237)</td>
<td>None(2)</td>
<td>400 lb/hr</td>
</tr>
<tr>
<td>Batching Station (EU DC 3201)</td>
<td>Dryer Baghouse (CE DC 3225)</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>Pneumatic Conveyance to Blender #1 (EU DC 3252)</td>
<td>Baghouse 1 (CE DC 3203)</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>Blending Station (EU DC 3205)</td>
<td>Baghouse 1 (CE DC 3203)</td>
<td>400 lb/hr</td>
</tr>
<tr>
<td>Hammer Mill (EU DC 3207)</td>
<td>NA(1)</td>
<td>1,500 lb/hr</td>
</tr>
<tr>
<td>Pneumatic Conveyance to Blender #2 (EU DC 3208)</td>
<td>Baghouse 3 (CE DC 3209)</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>Pneumatic Conveyance to Blender #3 (EU DC 3253)</td>
<td>Baghouse 3 (CE DC 3209)</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>Blending Station (EU DC 3210)</td>
<td>Baghouse 3 (CE DC 3209)</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>Rotary Sifter (EU DC 3211)</td>
<td>NA(1)</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>Pneumatic Conveyance to BDF (EU DC 3254)</td>
<td>BDF Baghouse (CE DC 3233)</td>
<td>2,000 lb/hr</td>
</tr>
<tr>
<td>BDF (EU DC 3213)</td>
<td>BDF Baghouse (CE DC 3233)</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>Volumetric Feeder (EU DC 3214)</td>
<td>NA(1)</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>Pan Granulator (EU DC 3215)</td>
<td>None(2)</td>
<td>500 lb/hr</td>
</tr>
<tr>
<td>Flexomix (EU DC 3256)</td>
<td>Baghouse 1 (CE DC 3203)</td>
<td>2,205 lb/hr</td>
</tr>
<tr>
<td>Extruder (EU DC 3217)</td>
<td>None(2)</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>Vibratory Fluid Bed Dryer (EU DC 3255)</td>
<td>Dryer Baghouse (CE DC 3225)</td>
<td>650 lb/hr</td>
</tr>
<tr>
<td>Bucket Elevator (EU DC 3219)</td>
<td>Dryer Baghouse (CE DC 3225)</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>Vibratory Screener (EU DC 3220)</td>
<td>Dryer Baghouse (CE DC 3225)</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>ACM Mill (EU DC 3232)</td>
<td>Baghouse 3 (CE DC 3209)</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>Packaging Area (EU DC 3234)</td>
<td>Dryer Baghouse (CE DC 3225)</td>
<td>400 lb/hr</td>
</tr>
<tr>
<td>Feeder (EU DC 3236)</td>
<td>NA(1)</td>
<td>1,500 lb/hr</td>
</tr>
<tr>
<td>Basket Granulator (EU DC 3247)</td>
<td>None(2)</td>
<td>1,500 lb/hr</td>
</tr>
<tr>
<td>Packaging Hopper (EU DC 3248)</td>
<td>NA(1)</td>
<td>400 lb/hr</td>
</tr>
<tr>
<td>Housekeeping Vacuum System (EU DC 32HVFC)</td>
<td>Vacuum System Baghouse (CE DC 3250)</td>
<td>800 lb/hr</td>
</tr>
</tbody>
</table>

**Raw Material/Fuel:** Herbicide
Applicable Requirements

**Emission Limits (lb/hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 95-A-400-S5

(1) An exceedance of the indicator opacity of "no visible emission (No VE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.71 lb/hr; 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 95-A-400-S5

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 7.99 lb/hr
Authority for Requirement: DNR Construction Permit 95-A-400-S5

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The owner or operator shall only use steam in the Vibratory Fluid Bed Dryer (EU DC 3255).

B. The average hourly production rate of this plant (TEST) shall not exceed 500 pounds per hour (lb/hr). On a daily basis, the owner or operator shall:
   a. Record the amount of product produced by the TEST plant, in pounds;
   b. Record the hours of operation for the TEST plant. The hours of operation for the process shall be defined as the amount of time that the Final Baghouse (CE DC 3229) operates; and
   c. Calculate and record the average hourly production rate (lb/hr) for the TEST plant based on the amount of product produced and the hours of operation.

C. For each product produced in the TEST plant, the owner or operator shall identify and document each VOC and HAP containing material used or produced. The owner or
operator shall maintain a copy of the Safety Data Sheet (SDS) for all materials used or
produced in the TEST plant.

D. As specified in Condition 2, VOC testing shall be conducted under worst case conditions
that are expected to result in the highest VOC emission rates. If process changes are made
that result in a new worst case condition that could reasonably be expected to increase VOC
emissions, the facility shall perform emissions testing within 90 days of the change or
request a determination from the IDNR.
   a. The facility shall document all products made and the corresponding operating
   scenarios.
   b. For each operating scenario, the facility shall calculate the VOC emissions, based
   on the methods used in the application for project 14-184 or other IDNR approved
   methods. The facility shall document all information need to perform the
calculation, including, but not limited to: calculation methods, emission episodes,
materials used, process temperatures, and process pressures.
   c. The facility shall document the worst case condition for VOC emissions. This will
   include the product made, the corresponding operating scenario, and the VOC
   emissions rates.
   d. The facility shall document the date of the tests performed for each worst case
   condition for VOC and the results of those tests.
   e. The facility shall document the date of any process changes that result in a new
   operating scenario. For each of these changes, the facility shall document the
   product made and the operating scenario and the corresponding emission estimates
   and information, as specified in Condition 5.DE(a) and (b) above. If a new
   operating scenario results in a new worst case scenario with a possible emission
   increase for VOC, the facility shall perform emissions testing for that pollutant
   within 90 days of the change or request a determination from the IDNR. The facility
   shall also document these actions upon completion.

Control Equipment Requirements
E. All process and control equipment for this process shall be operated and maintained
   according to the manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall maintain a record of all inspections and maintenance
   and any actions resulting from the inspections and maintenance of the process and
   control equipment in this process.
F. The owner or operator shall operate the control equipment at all times when equipmen
twhich vents to the control equipment is operating.
G. The differential pressure drop across the Final Baghouse (CE DC 3229) shall be maintained
between 1.0 and 7.0 inches water column except during periods of filter replacement.
   (1) The owner or operator shall record the pressure drop across the Final Baghouse (CE
DC 3229), in inches of water column, on a daily basis. If the pressure drop across
the Final Baghouse (CE DC 3229) falls outside the range of 1.0 and 7.0 inches
water column, the owner or operator shall investigate the baghouse and make
necessary corrections. The owner or operator shall also collect and record the
pressure drop across all other baghouses associated with the TEST plant, in inches
water column, on a daily basis. If the pressure drop across any of these baghouses
falls outside the range specified by the manufacturer, the owner or operator shall
investigate the baghouse and make the necessary corrections. The owner or operator shall maintain a record of all corrective actions taken on any of the baghouses associated with the TEST plant. This requirement shall not apply on any days that the process is not in operation.

**NSPS and NESHAP Requirements**

**H.** The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

   a. The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

**I.** All batch process vents associated with the TEST plant shall operate as Group 2 Batch Process Vents, as specified in 40 CFR Part 63 Subpart FFFF, §63.2550.

   a. The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the TEST plant, according to 40 CFR Part 63 Subpart FFFF, §63.2550.

   b. As specified in §63.2460 (b), the owner or operator shall determine and document the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process (EU TEST) using the procedures specified in §63.1257(d)(2)(i) and (ii), except as specified in paragraphs §63.2460 (b)(1) through (7).

   c. As specified in §63.2445(d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph §63.2460 (b)(6)(i) or (ii). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

   d. As specified in §63.2525(e)(4), unless one of the conditions specified in paragraphs §63.2525 (e)(1) through e(3) is met, the owner or operator must keep records of the information specified in paragraphs (e)(4)(i) through (iv), as applicable:

      i. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.

      ii. A record of whether each batch operated was considered a standard batch.

      iii. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

      iv. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

**J.** All continuous process vents associated with the TEST plant shall operate as a Group 2 continuous process vent, as specified in 40 CFR Part 63 Subpart FFFF, §63.2550.

   a. The owner or operator shall identify and determine and document the type (continuous or batch) and group status for all process vents associated with the TEST plant, according to 40 CFR Part 63 Subpart FFFF, §63.2550.
b. As specified in §63.2455(b), for each continuous process vent in the TEST plant, the facility shall determine and document the total resource effectiveness (TRE) index value, as specified in §63.115(d), except as specified in paragraphs §63.2455 (b)(1) through (3).

c. As specified in §63.2445(d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide a report as specified in §63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

K. As specified in § 63.2445 (d), if a Group 2 emission point becomes a Group 1 emission point after the compliance date, the owner or operator must comply with the Group 1 requirements beginning on the date the switch occurs and provide notification as specified in either paragraph § 63.2460 (b)(6)(i) or (ii) and 63.2520(e)(10)(ii)(C). An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs. The facility shall obtain the proper permit modifications for this change as specified in 567 IAC 22.1.

L. The facility shall analyze any changes in formulations and determine if there is a change in applicability for any NSPS or NESHAP subparts for the TEST plant.
   a. The facility shall document the results of any NSPS or NESHAP determinations as required above.

M. Any wastewater streams that are part of the miscellaneous organic chemical process unit for the TEST plant shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, §63.2485 and the requirements referenced therein.
   a. The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

Authority for Requirement: DNR Construction Permit 95-A-400-S5

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 95-A-400-S5
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 35  
Stack Opening, (inches, dia.): 18  
Exhaust Flow Rate (scfm): 13,000  
Exhaust Temperature (°F): 120  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: DNR Construction Permit 95-A-400-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number:** TEST-EL

**Associated Equipment**

**Associated Emission Unit ID Numbers (if multiple units vent thru this EP):** TEST-EL

---

**Emission Unit vented through this Emission Point:** TEST-EL

**Emission Unit Description:** Formulation Test Plant Equipment Leaks

**Raw Material/Fuel:** Herbicide

**Rated Capacity:** N/A

---

**Applicable Requirements**

**Emission Limits (lb/hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

None at this time.

**Authority for Requirement:** DNR Construction Permit 17-A-256

**Operating Requirements with Associated Monitoring and Recordkeeping**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. All Formulation Test Plant equipment shall be operated and maintained according to the manufacturer specifications and maintenance schedule. The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The Formulation Test Plant equipment shall have a maximum of 10 light or heavy liquid valves, 3 light or heavy liquid pumps, and 72 light or heavy liquid connectors. The Formulation Test Plant equipment shall not include any other valves, compressors, agitators, pressure relief valves, or other components. The owner or operator shall:
   a. Count and document the number and types of components used in the Formulation Test Plant. Components shall include, but are not limited to, valves, pumps, connectors, sampling connections, compressor seals, etc. The type must also include whether the components are "light liquid" or "heavy liquid" components. The terms "light liquid" and "heavy liquids" shall have the same definitions as "in light liquid service" and "in heavy liquid service" found in NSPS 40 CFR Part 60 Subpart UU, §63.1019, except that, if standard reference text or ASTM D2879-83,
96, or 97 data is unavailable, engineering judgement can be used to determine the vapor pressures; and
b. Modify the component count whenever the number of components change.

NSPS and NESHAP Requirements
C. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   a. The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.
D. The owner or operator shall meet all applicable requirements for equipment leaks as specified in 40 CFR Part 63 Subpart FFFF, §63.2480, Table 6, and in the referenced subparts F, H, or UU.
   a. The owner or operator shall document the subpart they are complying with, and meet all of the applicable requirements as specified in the referenced subpart, including the record keeping and reporting requirements. At the time of permit issuance, the owner or operator is complying with 40 CFR Part 63 Subpart UU, National Emission Standards for Equipment Leaks—Control Level 2 Standards, §63.1019 - §63.1039. The facility is allowed to change which subpart they are complying with; however, the owner or operator shall notify the Iowa DNR – Air Quality Bureau and DNR Field Office 2 in a compliance report if the subpart they are complying with has changed.
E. The facility shall analyze all changes in formulations or equipment counts and determine if there is a change in applicability for any NSPS or NESHAP subparts for the equipment used in the Formulation Test Plant.
   a. The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement:   DNR Construction Permit 17-A-256

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement:   DNR Construction Permit 17-A-256
   40 CFR 63 Subpart FFFF
   567 IAC 23.1(4)"cf"
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?  Yes ☐  No ☒

Facility Maintained Operation & Maintenance Plan Required?  Yes ☐  No ☒

Compliance Assurance Monitoring (CAM) Plan Required?  Yes ☐  No ☒

Authority for Requirement:  567 IAC 22.108(3)
## Emission Point ID Number: Building 42 Storage Tanks

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<tr>
<th>EP#</th>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>Control Equipment Description</th>
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</table>

Raw Material/Fuel: Herbicide
Applicable Requirements

**Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 13 tons/yr\(^{(1)}\)
Authority for Requirement: DNR Construction Permit 14-A-529-S4

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 17 tons/yr\(^{(2)}\)
Authority for Requirement: DNR Construction Permit 14-A-529-S4

Pollutant: Single Hazardous Air Pollutant (HAP)
Emission Limit(s): 0.80 tons/yr\(^{(3)}\)
Authority for Requirement: DNR Construction Permit 14-A-529-S4

Pollutant: Total Hazardous Air Pollutant (HAP)
Emission Limit(s): 10 tons/yr\(^{(4)}\)
Authority for Requirement: DNR Construction Permit 14-A-529-S4


\(^{(2)}\) Emission limits apply to emissions for B37 Processing Plant. This limit applies to all of the emission episodes for the B37 Processing Plant listed in operating limit section of this permit.


was requested by the facility to limit the potential emissions of project 13-423 below 25 tpy of combined HAP to classify this project as a minor source of HAP emissions for 40 CFR Part 63 Subpart FFFF-National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

**Operating Requirements with Associated Monitoring and Recordkeeping**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

**General Operating Limits and Recordkeeping Requirements**

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only store materials for the Building 37 and Area 46 processing lines in the Building 42 (B42) tank farm.
   (1) For all materials stored in the tanks in the Building 42 (B42) tank farm, the owner or operator shall record and document the tank used, the material stored, the origins of the material (i.e. B37, Area 46) and amount of VOC-containing material stored.
   (2) The facility shall maintain a copy of the Safety Data Sheet (SDS) for all materials stored in the tanks in the B42 tank farm.

C. The permittee shall keep all ports and manways on the tanks in a closed position at all times when storing liquid materials other than when adding materials, measuring liquid heights, and cleaning or maintaining the tanks. Materials must be added to the tank in a manner that minimizes emissions.
   (1) The owner or operator shall inspect the tanks quarterly to ensure all ports and manways are closed. The facility shall document the results of the inspection.

D. The permittee shall employ good housekeeping practices. Cleanup of liquid spills shall be initiated promptly upon discovery.
   (1) The owner or operator shall document all good housekeeping practices used at the facility to minimize emissions from liquid spills.

**Recordkeeping for the Area 46 VOC and HAP Emission Caps**

The following monitoring and recordkeeping requirements are used to show compliance with the VOC, Single HAP, and Total HAP emission limit caps in the emission limits section of this permit. The Single HAP emissions are defined as the emissions of any individual HAP emitted by the emission episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF. The Total HAP emissions are defined as the sum of all Single HAP emitted by the episode/unit/process that is regulated by 40 CFR Part 63 Subpart FFFF.

The VOC emission limit covers the following emission episodes from the emission units covered under this permit for the production of products made in the Area 46 process:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Drum Heating
Laboratory Emissions
Tank Cleaning Emissions
Tanker Cleaning Emissions

The HAP emission limits covers the following emission episodes from the emission units covered under this permit for the production of products made in Area 46:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Tank Evaporation
Heating
Process Tank Cleaning Emissions

The limit only covers emissions from units that are part of the miscellaneous organic chemical manufacturing process unit (MCPU) for Area 46 process as defined in the subpart.

The facility must keep the following records to show compliance with the emission limit caps:

E. For each product produced in the Area 46, that uses a VOC-containing or HAP-containing material, the permittee shall determine and record the VOC, Single HAP, and Total HAP emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

   1. The permittee shall identify and document each product produced.
   2. The permittee shall identify and document each standard and nonstandard batch used to produce each product.
   3. The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures,
vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition EG.5. The facility shall document and provide a justification for the value for each input used.

(4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

(5) The permittee shall calculate and record the VOC, Single HAP, and Total HAP emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.
f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.
g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the VOC, Single HAP, and Total HAP emission rate (tons/batch) by summing the emission rate of each emission episode.

F. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition EG.3 above that define the standard batch in order to make the determination of whether the batch is standard or nonstandard.

G. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC, Single HAP, and Total HAP ton per year emission limit caps in the emission limit section of this permit:

(1) The identification of each VOC-containing or HAP-containing material processed, used, or generated; as required to calculate the VOC and HAP emissions for the emission limit caps.

(2) The daily number of standard or nonstandard batches completed for each product produced.

H. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.

(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

I. If the 12-month rolling total of the VOC emissions exceeds 10.4 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.

(2) The total amount of VOC emissions for each product produced, in tons.

(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 10.4 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 10.4 tons, daily recordkeeping will be required per this Condition of this permit.

J. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding Single HAP emissions, in tons.
   (2) The total amount of Single HAP emissions for each product produced, in tons.
   (3) The total amount of Single HAP emissions for all products produced, in tons.
   (4) The 12-month rolling total of the amount of Single HAP emissions from all products produced, in tons.

K. If the 12-month rolling total of the Single HAP emissions exceeds 0.80 tons from all emission units/episodes covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit., the permittee shall immediately begin keeping the following daily records:
   (1) The number of standard and nonstandard batches and the corresponding Single HAP emissions, for each product produced, in tons.
   (2) The total amount of Single HAP emissions for each product produced, in tons.
   (3) The total amount of Single HAP emissions for all products produced, in tons.
   (4) The 365-day rolling total of the amount of Single HAP emissions from all products produced, in tons.

Daily calculations for Single HAP emissions shall continue until the 365-day rolling total of the amount of Single HAP emissions from all emission units covered by the Single HAP ton per year emission limit cap in the emission limit section of this permit drops below 0.80 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Single HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 0.80 tons, daily recordkeeping will be required per this Condition of this permit.

L. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit:
   (1) The number of standard and nonstandard batches completed for each product produced and the corresponding Total HAP emissions, in tons.
   (2) The total amount of Total HAP emissions for each product produced, in tons.
   (3) The total amount of Total HAP emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of Total HAP emissions from all products produced, in tons.

M. If the 12-month rolling total of the Total HAP emissions exceeds 8.0 tons from all emission units/episodes covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

1. The number of standard and nonstandard batches and the corresponding Total HAP emissions, for each product produced, in tons.
2. The total amount of Total HAP emissions for each product produced, in tons.
3. The total amount of Total HAP emissions for all products produced, in tons.
4. The 365-day rolling total of the amount of Total HAP emissions from all products produced, in tons.

Daily calculations for Total HAP emissions shall continue until the 365-day rolling total of the amount of Total HAP emissions from all emission units covered by the Total HAP ton per year emission limit cap in the emission limit section of this permit drops below 8.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of Total HAP emissions will cease per this Condition of this permit. If the emissions once again exceed 8.0 tons, daily recordkeeping will be required per this Condition of this permit.

N. The permittee shall retain Material Safety Data Sheets (MSDS) for all VOC and HAP containing materials used in the emission units covered under the Area 46 Emission Caps.

Recordkeeping for the Building 37 Processing Plant VOC Emission Cap
The following monitoring and recordkeeping requirements are used to show compliance with the VOC emission limit cap in Condition 1 of this permit for the Building 37 Processing Plant. The VOC emission limit covers VOC emissions from the emission units listed in the permits for emissions points 37-1, 37-2, 37-3, and 37-4; those listed in the permits for Building 37 – Interior VOC Emissions, as well as those from miscellaneous sources related to B37 production, including emissions from packaging, laboratory activity, and tank and floor cleaning. The limit also covers VOC emissions from storing materials from B37 in the storage tanks in buildings B11, B39 and B42, and packaging and loadout in buildings B11, B14, B39 and B42. The VOC emission limit covers the following emission episodes from these emission units for the production of products made in the Building 37 Processing Plant:

Displacement, Packaging, and Bulk Loadout (Filling)
Storage Tanks
Gas Sweep
Solids Handling
Evaporation from Screens and Open Tanks
Heating
Ancillary Packaging Emissions - Ink Jet & Stenciling
Laboratory Emissions
Tank Cleaning Emissions
Floor Cleaning Emissions

The facility must keep the following records to show compliance with the VOC emission limit cap:

O. For each product produced in the Building 37 Processing Plant, that uses a VOC-containing material, the permittee shall determine and record the VOC emission rate (tons/batch) for each standard and nonstandard batch used to produce the product.

1) The permittee shall identify and document each product produced.

2) The permittee shall identify and document each standard and nonstandard batch used to produce each product.

3) The facility shall record the operating scenario for each standard and nonstandard batch. The operating scenario shall list all of the inputs (throughputs, temperatures, vapor pressures, molecular weights, etc.) necessary to calculate the emissions using in the equations listed below in Condition O5.4.5. The facility shall document and provide a justification for the value for each input used.

4) The permittee shall identify and record each type of emission unit used and the associated emission episodes (as defined in 40 CFR Part 63 Subpart GGG, 63.1251) for each standard and nonstandard batch.

5) The permittee shall calculate and record the VOC emission rate per batch for each emission episode (tons/batch). The emission rates for each emission episode shall be based on emission factors or emission estimation method developed by the permittee according to the guidelines given below. The permittee’s calculation of each emission factor or emission estimation method shall be subject to the review and approval of the Iowa DNR - Air Quality Bureau. If necessary, the permittee shall conduct emission testing, at the request of the Iowa DNR - Air Quality Bureau, during the production of a specific final product to confirm the accuracy of the emission factor.

a. For emissions from Material Loading, Vessel/Container Filling, Vapor Displacement, Process Tank Cleaning, and Packaging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG); or Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.1; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.1 shall be used.

b. For emissions from breathing and working losses from storage tanks and storage tank cleaning, Version 4.09 (or better) of the TANKS software or the appropriate equations and methods provided in EPA’s AP 42, Compilation of Air Pollutant Emission Factors Section, 7.1, November 2006 (or the most recent version).

c. For emissions from Gas Sweep/Purging the appropriate equations and methods provided in §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG), or in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.5; or Volume 2, Chapter 16, Methods for
Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.2 shall be used.

d. For emissions from Evaporation the appropriate equations and methods provided in Emission Inventory Improvement Program (EIIP) EPA documents: Volume 2, Chapter 8, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Section 4.3 and 4.4; or Volume 2, Chapter 16, Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Section 3.7 shall be used.

e. For emissions from heating, depressurization, gas evolution, air drying, and empty vessel purging, the appropriate equations from §63.1257(d)(2)(i) (40 CFR Part 63, Subpart GGG) shall be used. Engineering assessments, as described in 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) may also be used.

f. For other batch emission episodes in the production of products, appropriate estimation methods as stated in § 63.1257(d)(2)(ii) (40 CFR Part 63, Subpart GGG) shall be used.

g. For products where no U.S. EPA emission calculations methods are applicable, stack testing or standard engineering principles shall be used to best represent the emission rate from the unit.

The facility shall document and provide justification for the emission factors and/or emission estimation methods used for each emission episode.

(6) The facility shall document whether each emission episode is regulated by 40 CFR Part 63 Subpart FFFF.

(7) For every standard and nonstandard batch for each product, the facility shall calculate and document the total VOC emission rate (tons/batch) by summing the emission rate of each emission episode.

P. The permittee shall record each batch completed. The record shall include the product produced, and whether it is a standard or nonstandard batch.

(1) The permittee shall use the operating scenarios required in Condition O5-L.(3) above that defines the standard batch in order to make the determination of whether the batch is standard or nonstandard.

Q. The permittee shall maintain the following daily records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The identification of each VOC-containing material processed, used, or generated; as required to calculate the VOC emissions for the emission limit cap.

(2) The daily number of standard or nonstandard batches completed for each product produced.

R. The permittee shall maintain the following monthly records for all of the emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit:

(1) The number of standard and nonstandard batches completed for each product produced and the corresponding VOC emissions, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 12-month rolling total of the amount of VOC emissions from all products produced, in tons.

S. If the 12-month rolling total of the VOC emissions exceeds 13.5 tons from all emission units/episodes covered by the VOC ton per year emission limit cap in the emission limit section of this permit, the permittee shall immediately begin keeping the following daily records:

(1) The number of standard and nonstandard batches and the corresponding VOC emissions, for each product produced, in tons.
(2) The total amount of VOC emissions for each product produced, in tons.
(3) The total amount of VOC emissions for all products produced, in tons.
(4) The 365-day rolling total of the amount of VOC emissions from all products produced, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all emission units covered by the VOC ton per year emission limit cap in the emission limit section of this permit drops below 13.5 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this Condition of this permit. If the emissions once again exceed 13.5 tons, daily recordkeeping will be required per this Condition of this permit.

NSPS and NESHAP Requirements

T. The maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL), as defined in 40 CFR Part 51.100, stored in the bulk storage tanks TK-993 - TK-1024 shall be less than 15.0 kPa.

(1) The facility shall keep readily accessible records showing the dimensions and capacity for the bulk storage tanks TK-993 - TK-1024.
(2) The facility shall document the maximum true vapor pressure, as defined in 40 CFR Part 60.111b, of the volatile organic compounds (VOL) stored in the bulk storage tanks TK-993 - TK-1024.
(3) The facility shall notify the Administrator within 30 days if the maximum true vapor pressure of the liquids stored in the bulk storage tanks TK-993 - TK-1024 exceeds 15.0 kPa.

U. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.

(1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

V. The owner or operator shall determine and document which storage tanks covered under this permit is subject to 40 CFR Part 63 Subpart FFFF, and, if subject, to which miscellaneous organic chemical process unit (MCPU) the tank is assigned, using the procedures in § 63.2435 (d), if applicable.
W. The material stored in the bulk storage tanks TK-993 - TK-1024 that are part of a miscellaneous organic chemical process unit, and with a capacity greater than or equal to 10,000 gallons, shall have a maximum true vapor pressure of 6.9 kPa (pounds per square inch, absolute (psia)), as specified for Group 2 Storage Tank, in 40 CFR Part 63 Subpart FFFF, 63.2550.

(1) The owner or operator shall determine and document the maximum true vapor pressure and the group status for the storage tanks that are part of a miscellaneous organic chemical process unit for the B42 Tank Farm, as specified in 40 CFR Part 63 Subpart FFFF, 63.2550.

X. The facility shall analyze all changes in material stored in any applicable storage tank and determine if there is a change in applicability for any NSPS or NESHAP subparts. (1) The facility shall document all changes in the contents of the tanks or process or formulations changes to any tank that is part of a MCPU and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 14-A-529-S4

**NSPS and NESHAP Applicability**

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 14-A-529-S4

40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

<table>
<thead>
<tr>
<th>EP ID</th>
<th>Stack Height, Feet</th>
<th>Discharge Style</th>
<th>Stack Opening, inches</th>
<th>Stack Temperature, °F</th>
<th>Exhaust Flowrate, SCFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-B42TF-1000</td>
<td>12.5</td>
<td>Downward</td>
<td>6</td>
<td>74</td>
<td>Displacement</td>
</tr>
<tr>
<td>EP-B42TF-1001-1004, 1013-1016, 1019-1024</td>
<td>12.0</td>
<td>Downward</td>
<td>3</td>
<td>74</td>
<td>Displacement</td>
</tr>
</tbody>
</table>

Authority for Requirement: DNR Construction Permit 14-A-529-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☑
- **Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☑
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☐ No ☑

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: EP-B35 Packaging

Associated Equipment

<table>
<thead>
<tr>
<th>EU ID</th>
<th>Description</th>
<th>Maximum Rated Capacity</th>
<th>Control Equipment Description and ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-B35-3500</td>
<td>B35 Container Unloading</td>
<td>3000 lb/hr</td>
<td>Baghouse (CE-B35-Final)</td>
</tr>
<tr>
<td>EU-B35-3510</td>
<td>B35 Packaging Hopper</td>
<td>3000 lb/hr</td>
<td></td>
</tr>
<tr>
<td>EU-B35-3520</td>
<td>B35 Packaging Equipment</td>
<td>1250 lb/hr</td>
<td></td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Herbicide

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%\(^{(1)}\)
Authority for Requirement: DNR Construction Permit 20-A-373

\(^{(1)}\) An exceedance of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 13 tons/yr\(^{(1)}\)
Authority for Requirement: DNR Construction Permit 20-A-373

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. B35 packaging area is limited to package only solid granulated materials from DF-8, DF-10, DF-11, Development Center (DC), and external packaging operations.
   a. The owner or operator shall keep a log of the type of material and the location of material production.

**Control Equipment Requirements**

B. The owner or operator shall operate the control equipment at all times when emissions are vented to them.
C. The owner or operator shall operate, inspect and maintain all the equipment associated with the process and the Final Baghouse (CE-B35-Final) in accordance with manufacturer's specifications and maintenance schedule.
   a. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from the inspection or maintenance of the Final Baghouse (CE-B35-Final).

D. The differential pressure drop across the Final Baghouse (CE-B35-Final) shall be maintained between 0.1 and 7.0 inches water column except during periods of filter replacement.

   (1) The owner or operator shall collect and record the pressure drop across the Final Baghouse (CE-B35-Final), in inches of water, on a daily basis. If the pressure drop across the Final Baghouse (CE-B35-Final) falls outside the range specified above, the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall maintain a record of all corrective actions taken. The permittee shall maintain a record any corrective action taken for which data show a deviation from the specified pressure drop range above, including the date and time of the deviations, the date and time corrective action was initiated and completed, and the corrective action taken. This requirement shall not apply on the days the process is not in operation.

Authority for Requirement: DNR Construction Permit 20-A-373

NSPS and NESHAP Applicability
This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 20-A-373
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stack Height (feet from the ground)</td>
<td>NA*</td>
</tr>
<tr>
<td>Discharge Style</td>
<td>NA*</td>
</tr>
<tr>
<td>Stack Outlet Dimensions (inches)</td>
<td>NA*</td>
</tr>
<tr>
<td>Exhaust Temperature (°F)</td>
<td>70</td>
</tr>
<tr>
<td>Exhaust Flowrate (scfm)</td>
<td>2,500</td>
</tr>
</tbody>
</table>

Authority for Requirement:  DNR Construction Permit 20-A-373

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒
- **Compliance Assurance Monitoring (CAM) Plan Required?** Yes ☐ No ☒

Authority for Requirement:  567 IAC 22.108(3)
**Emission Point ID Number: B38WW**

### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit Description (EU ID)</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wastewater Treatment Floc Bag Dump Station 1 (EU-WWTP-DS1)</td>
<td>None</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>Wastewater Treatment Floc Bag Dump Station 2 (EU-WWTP-DS2)</td>
<td>None</td>
<td>1,000 lb/hr</td>
</tr>
<tr>
<td>Wastewater Treatment Tank 905 (EU WWTP-TK905)</td>
<td>None</td>
<td>50,000 gallons</td>
</tr>
<tr>
<td>Wastewater Treatment Floc Tank 1 (EU WWTP-FT1)</td>
<td>None</td>
<td>450 gallons</td>
</tr>
<tr>
<td>Wastewater Treatment Floc Tank 2 (EU WWTP-FT2)</td>
<td>None</td>
<td>450 gallons</td>
</tr>
<tr>
<td>Wastewater Treatment Tank 902 (EU WWTP-TK902)</td>
<td>None</td>
<td>7,000 gallons</td>
</tr>
<tr>
<td>Wastewater Treatment Tank 903 (EU WWTP-TK903)</td>
<td>None</td>
<td>7,000 gallons</td>
</tr>
<tr>
<td>Wastewater Treatment Tank 904 (EU WWTP-TK904)</td>
<td>None</td>
<td>7,000 gallons</td>
</tr>
</tbody>
</table>

**Raw Material/Fuel: Herbicide**

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

**Pollutant: Opacity**

**Emission Limit(s):** 40% \(^{(1)}\)

**Authority for Requirement:** 567 IAC 23.3(2)"d"  
DNR Construction Permit 19-A-354

\(^{(1)}\) An exceedance of the indicator opacity of 25% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

**Pollutant: Particulate Matter (PM)**

**Emission Limit(s):** 0.1 gr/dscf

**Authority for Requirement:** 567 IAC 23.3(2)"a"  
DNR Construction Permit 19-A-354
Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Operating Limits and Recordkeeping Requirements

A. All process equipment shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.

B. The owner or operator shall only treat wastewater from the dry flowable plants; liquid plants 4L-SF, EC-17, B21; and the Truck Wash.
   (1) The owner or operator shall keep a record of all wastewater treated in B38 and the origins of the wastewater.

C. The amount of wastewater processed in building B38 shall not exceed 3.0 million gallons per rolling twelve-month period.
   (1) The permittee shall maintain the following monthly records for wastewater processed in building B38:
      a) The identification of each VOC-containing material present in the wastewater;
      b) a copy of the Safety Data Sheet (SDS) for each VOC-containing material present in the wastewater;
      c) the amount of wastewater processed;
      d) the twelve month total rolling total of wastewater processed.

D. The product of the true vapor pressure and the vapor molecular weight of wastewater processed in building B38 shall be less than 3.5 psia ∙ lb ∙ lb ∙ mol.
   (1) The facility shall maintain a list of dry product and liquid product facilities that send wastewater to B38 for treatment.
   (2) Monthly, the owner or operator shall collect a representative sample of wastewater from one of the dry product or liquid product facilities. The company shall choose the facility based on the list developed in D.1. The company shall start from the top of the list and sample the next available facility so that all plants are tested as equally as possible. The company shall record which plant was tested and the date.
   (3) The owner or operator shall collect a representative sample of the wastewater and analyze it to determine the constituent and total VOC concentrations. The facility shall use IDNR approved method to determine the concentrations. Wastewater samples shall be collected at the end of the process and using sampling procedures which minimize loss of organic compounds during sample collection and analysis and maintain sample integrity. The facility shall document the methods used to sample and analyze the wastewater.
   (4) The owner or operator shall use the constituent and total VOC concentrations obtained above to determine the VOC vapor pressure and vapor molecular weight...
and the product of the true vapor pressure and the vapor molecular weight of the wastewater processed in building B38 and record the results. The facility shall document the methods used to make this determination.

NSPS and NESHAP Requirements

E. The owner or operator shall meet all applicable requirements of National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing-Subpart FFFF.
   (1) The owner or operator shall meet all of the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2515, §63.2520, and §63.2525.

F. Any wastewater streams that are part of the miscellaneous organic chemical process unit shall operate as a Group 2 Wastewater Streams, as specified in 40 CFR Part 63 Subpart FFFF, 63.2485 and the requirements referenced therein.
   (1) The owner or operator shall meet all of the applicable reporting and recordkeeping requirements specified in 40 CFR Part 63 Subpart FFFF, §63.2520, and §63.2525, and the requirements referenced therein, including applicable requirements specified in 40 CFR Part 63 Subpart G in §63.146(b)(1), and §63.147(b)(8).

G. The facility shall analyze all changes in the process, formulations, or equipment and determine if there is a change in applicability for any NSPS or NESHAP subparts for the building B38 wastewater plant.
   (1) The facility shall document all process changes and the results of all NSPS or NESHAP determinations made for these changes.

Authority for Requirement: DNR Construction Permit 19-A-354

NSPS and NESHAP Applicability

This emission point is subject to the requirements of 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants; Miscellaneous Organic Chemical Manufacturing.

Authority for Requirement: DNR Construction Permit 19-A-354
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): 24
- Stack Opening, (inches, dia.): 10
- Exhaust Flow Rate (scfm): 400
- Exhaust Temperature (°F): 74
- Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 19-A-354

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- **Agency Approved Operation & Maintenance Plan Required?** [ ] Yes [x] No
- **Facility Maintained Operation & Maintenance Plan Required?** [ ] Yes [x] No
- **Compliance Assurance Monitoring (CAM) Plan Required?** [ ] Yes [x] No

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number: Spray Booth**

**Associated Equipment**

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): Spray Booth
Emissions Control Equipment ID Number: CE- Spray Booth
Emissions Control Equipment Description: Dry Filters
Continuous Emissions Monitors ID Numbers: N/A

**Emission Unit vented through this Emission Point:** Spray Booth
Emission Unit Description: Paint Spray Booth
Raw Material/Fuel: Paint
Rated Capacity: 1.5 gal/hr

**Applicable Requirements**

**Emission Limits (lb/hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

- **Pollutant:** Opacity
  - Emission Limit(s): 40% (1)
  - Authority for Requirement: 567 IAC 23.3(2)"d"
    DNR Construction Permit 19-A-094

  (1) An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

- **Pollutant:** Particulate Matter (PM)
  - Emission Limit(s): 0.01 gr./dscf
  - Authority for Requirement: 567 IAC 23.4(13)
    DNR Construction Permit 19-A-094

**Operating Requirements with Associated Monitoring and Recordkeeping**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The VOC content of any VOC containing material used in this paint booth shall not exceed 7.5 pounds per gallon.
B. The amount of VOC containing material used in this paint booth shall not exceed 600 gallons in any rolling 12-month period.

C. The amount of spray coating material, as defined in §63.3981, that contain hazardous air pollutants (HAP) used in the surface coating of miscellaneous metal parts and products as defined in paragraph §63.3881(a) at this facility shall not exceed 250 gallons in any rolling 12-month period.

D. The amount of spray coating material, as defined in §63.4581, that contain hazardous air pollutants (HAP) used in the surface coating of plastic parts and products as defined in paragraph §63.4481(a) at this facility shall not exceed 100 gallons in any rolling 12-month period.

E. The owner or operator shall maintain manufacturer and vendor provided information (Safety Data Sheets (SDS), Material Safety Data Sheet (MSDS), technical data sheets, etc.) for all materials used in this paint booth.

F. The owner or operator shall maintain a log listing each material used in this paint booth along with the respective VOC content, in pounds per gallon.

G. The owner or operator shall maintain the following monthly records:
   (1) The amount of VOC containing material used in this paint booth, in gallons;
   (2) The rolling 12-month total of the amount of VOC containing material used in this paint booth, in gallons;
   (3) The amount of spray coating material, as defined in §63.3981, that contain hazardous air pollutants (HAP) used in the surface coating of miscellaneous metal parts and products as defined in paragraph §63.3881(a), at the facility in gallons;
   (4) The rolling 12-month total of spray coating material, as defined in §63.3981, that contain hazardous air pollutants (HAP) used in the surface coating of miscellaneous metal parts and products as defined in paragraph §63.3881(a), at the facility in gallons.
   (5) The amount of spray coating material, as defined in §63.4581, that contain hazardous air pollutants (HAP) used in the surface coating of plastic parts and products as defined in paragraph §63.4481(a), at the facility in gallons.
   (6) The rolling 12-month total of spray coating material, as defined in §63.4581, that contain hazardous air pollutants (HAP) used in the surface coating of plastic parts and products as defined in paragraph §63.4481(a), at the facility in gallons.

H. All process and control equipment for this process shall be operated and maintained according to manufacturer specifications and maintenance schedule.
   (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the control and process equipment for this process.

I. The owner or operator shall operate the control equipment at all times when emissions are vented to them.

Authority for Requirement: DNR Construction Permit 19-A-094
**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 4.25  
Stack Opening, (inches, dia.): 33 x 33  
Exhaust Flow Rate (scfm): 1,600  
Exhaust Temperature (°F): 70  
Discharge Style: Horizontal  
Authority for Requirement: DNR Construction Permit 19-A-094

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☑ No ☐
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☑
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☑ No ☐

**Paint Booth Agency Operation & Maintenance Plan**

**Weekly**
- Inspect the paint booth system for conditions that reduce the operating efficiency of the collection system. This will include a visual inspection of the condition of the filter material.
- Maintain a written record of the observation and any action resulting from the inspection.

**Record Keeping and Reporting**
Maintenance and inspection records will be kept for five years and available upon request.

**Quality Control**
- The filter equipment will be operated and maintained according to the manufacturers recommendations.

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: Boilers

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point ID</th>
<th>Emission Unit Description (EU ID)</th>
<th>Control Equipment</th>
<th>Maximum Rated Capacity (E6BTU/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boil 1</td>
<td>Boil 1</td>
<td>None</td>
<td>7.3</td>
</tr>
<tr>
<td>Boil 2</td>
<td>Boil 2</td>
<td>None</td>
<td>1.7</td>
</tr>
<tr>
<td>Boil 3</td>
<td>Boil 3</td>
<td>None</td>
<td>6.3</td>
</tr>
<tr>
<td>Boil 4</td>
<td>Boil 4</td>
<td>None</td>
<td>7.3</td>
</tr>
<tr>
<td>Boil 5</td>
<td>Boil 5</td>
<td>None</td>
<td>2.6</td>
</tr>
<tr>
<td>Boil 6</td>
<td>Boil 6</td>
<td>None</td>
<td>3.75</td>
</tr>
<tr>
<td>Boil 7</td>
<td>Boil 7</td>
<td>None</td>
<td>6.3</td>
</tr>
<tr>
<td>Boil 8</td>
<td>Boil 8</td>
<td>None</td>
<td>4.2</td>
</tr>
<tr>
<td>Boil 9</td>
<td>Boil 9</td>
<td>None</td>
<td>7.3</td>
</tr>
<tr>
<td>Boil 10</td>
<td>Boil 10</td>
<td>None</td>
<td>4.2</td>
</tr>
<tr>
<td>Boil 11</td>
<td>Boil 11</td>
<td>None</td>
<td>0.53</td>
</tr>
<tr>
<td>Boil 12</td>
<td>Boil 12</td>
<td>None</td>
<td>0.42</td>
</tr>
<tr>
<td>Boil 13</td>
<td>Boil 13</td>
<td>None</td>
<td>0.53</td>
</tr>
<tr>
<td>Boil 14</td>
<td>Boil 14</td>
<td>None</td>
<td>0.53</td>
</tr>
<tr>
<td>Boil 15</td>
<td>Boil 15</td>
<td>None</td>
<td>2.0</td>
</tr>
<tr>
<td>Boil 16</td>
<td>Boil 16</td>
<td>None</td>
<td>6.3</td>
</tr>
</tbody>
</table>

Raw Material/Fuel: Natural Gas

Applicable Requirements

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.8 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppm
Authority for Requirement: 567 IAC 23.3(3)"e"
NSPS and NESHAP Applicability
This equipment is of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63 Subpart DDDDD].

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number:** AA

**Associated Equipment**

**Associated Emission Unit ID Numbers** (if multiple units vent thru this EP): AA

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**Emission Unit vented through this Emission Point:** AA  
**Emission Unit Description:** Anhydrous Ammonia Storage Tanks  
**Raw Material/Fuel:** Anhydrous Ammonia  
**Rated Capacity:** 150,000 Gallons

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

None at this time.

**Operating Requirements with Associated Monitoring and Recordkeeping**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

None at this time.

**Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes ☐ No ☒</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Approved Operation &amp; Maintenance Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
</tbody>
</table>

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: GEN 1

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): GEN 1

Emission Unit vented through this Emission Point: GEN 1
Emission Unit Description: 115 HP Emergency Generator
Raw Material/Fuel: Natural Gas
Rated Capacity: 115 HP

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/scf
Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: NOx
Emission Limit(s): 10 g/HP-hr
Authority for Requirement: 40 CFR 60.4233(e)

Pollutant: CO
Emission Limit(s): 387 g/HP-hr
Authority for Requirement: 40 CFR 60.4233(e)"

Pollutant: Sulfur Dioxide (SO2)
Emission Limit(s): 500 ppm
Authority for Requirement: 567 IAC 23.3(3)"e"

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NESHAP:
The emergency engine is subject to 40 CFR Part 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(ii) this spark ignition emergency engine,
located at a major source, is a new stationary RICE as it was constructed on or after June 12, 2006.

According to 40 CFR 63.6590(c)(6), this emergency engine must meet the requirements of subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart JJJJ for spark ignition engines. No further requirements apply for this engine under subpart ZZZZ.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4) "cz"

NSPS Subpart JJJJ Requirements

For Engines ≥ 100 hp, constructed after 6/12/2006 and manufactured on or after 1/1/2009:
Emergency, SI, All Fuel (except Gasoline & Rich Burn LPG)

Emission Standards:
(40 CFR 60.4233(e) and Table 1 to Subpart JJJJ)

<table>
<thead>
<tr>
<th>Maximum Engine Power</th>
<th>Manufacture Date</th>
<th>Emission Standards (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>g/HP-hr NOx HC + NOx CO (2) VOC (3) NOx CO VOC</td>
</tr>
<tr>
<td>25 &lt; HP &lt; 130</td>
<td>1/1/2009+</td>
<td>N/A 10 387 N/A N/A N/A</td>
</tr>
</tbody>
</table>

(1) Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O$_2$.

(2) See rule for alternative CO certification standards for engines ≥ 100 hp and manufactured prior to 1/1/2011.

(3) Formaldehyde emissions are not included.

Compliance Demonstrations:
1. You must demonstrate compliance with the emission standards according to one of following methods (40 CFR 60.4243(b)):
   a) Purchasing a certified engine that complies with the emission standards, or
   b) Purchasing a non-certified engine and demonstrating compliance with the emission standards. You must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct performance tests to demonstrate compliance in accordance with 40 CFR 60.4244. Owners and operators are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 4243(b) for additional information.

<table>
<thead>
<tr>
<th>Maximum Engine Power</th>
<th>Initial Test</th>
<th>Subsequent Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 &lt; HP ≤ 500</td>
<td>Required</td>
<td>Not required</td>
</tr>
</tbody>
</table>

2. Owners and operators of SI engines that are required to be certified and who operate and maintain the engine according to the manufacturer’s written instructions must keep records of required maintenance. 40 CFR 60.4243(b)(1), 4243(a) and 4245(a)(2).
3. Owners and operators of natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, a performance test must be conducted to demonstrate compliance with the emission standards. 40 CFR 60.4243(e).

4. If you are an owner or operator of engine \( \leq 500 \) HP and you purchase a non-certified engine or you do not operate and maintain your certified engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing, but you are not required to conduct subsequent performance testing unless the engine is rebuilt or undergoes major repair or maintenance. 40 CFR 60.4243(f).

5. Owners and operators of certified engines must keep a record from the manufacturer that the engines are certified to meet applicable emission standards. 40 CFR 60.4245(a)(3).

6. Owners and operators of non-certified engines or certified engines operating in a non-certified manner must keep documentation that these engines meet the applicable emission standards. 40 CFR 60.4245(a)(4).

Operating and Recordkeeping Requirements (40 CFR 4243(d))

1. Owners and operators of the following emergency SI engines that do not meet the applicable standards for non-emergency engines must install a non-resettable hour meter. 40 CFR 60.4237.

<table>
<thead>
<tr>
<th>Maximum Engine Power</th>
<th>Engine Was Built On Or After</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP &lt; 130</td>
<td>7/1/2008</td>
</tr>
</tbody>
</table>

2. There is no time limit on the use of the emergency engine in emergency situations.

3. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours/year.

4. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing.

5. Owners and operators of an emergency engine must keep records of all operation of the engine. The owner must record the date and time of operation of the engine and the reason the engine was in operation.

6. Owners and operators of the following emergency SI that does not meet the applicable standards for a non-emergency engine must keep the following records. 40 CFR 60.4245(b).

<table>
<thead>
<tr>
<th>Maximum Engine Power</th>
<th>Manufactured On Or After</th>
<th>Recordkeeping Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 &lt; HP &lt; 130</td>
<td>7/1/2008</td>
<td>Hours of operation recorded through a non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.</td>
</tr>
</tbody>
</table>
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?  Yes ☐  No ☒
Facility Maintained Operation & Maintenance Plan Required?  Yes ☐  No ☒
Compliance Assurance Monitoring (CAM) Plan Required?  Yes ☐  No ☒

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Number: GEN 2

Associated Equipment

Emission Unit vented through this Emission Point: GEN 2
Emission Unit Description: 82 HP Emergency Generator
Raw Material/Fuel: Natural Gas
Rated Capacity: 82 HP

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/scf
Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppm
Authority for Requirement: 567 IAC 23.3(3)"e"

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements

NESHAP:
The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE).
According to 40 CFR 63.6590(a)(1)(ii) this spark ignition emergency engine, located at a major source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

Compliance Date
Per 63.6595(a)(1) you must comply with the provisions of subpart ZZZZ that are applicable by October 19, 2013.

Operation and Maintenance Requirements 40 CFR 63.6602, 63.6625, 63.6640 and Tables 2c and 6 to Subpart ZZZZ
1. Change oil and filter every 500 hours of operation or annually, whichever comes first.
   (See 63.6625(j) for the oil analysis option to extend time frame of requirements.)
2. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Install a non-resettable hour meter if one is not already installed.
6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

Operating Limits 40 CFR 63.6640(f)
1. Any operation other than emergency operation, maintenance and testing and operation in non-emergency situations (up to) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Recordkeeping Requirements 40 CFR 63.6655
1. Keep records of the maintenance conducted on the stationary RICE.
2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

Notification and Reporting Requirements 40 CFR 63.6645, 63.6650 and Table 2c to Subpart ZZZZ
1. An initial notification is not required per 40 CFR 63.6645(a)(5).
2. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2c. (See Footnote 1 of Table 2c for more information.)

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? ☐ Yes ☐ No ✗

Facility Maintained Operation & Maintenance Plan Required? ☐ Yes ☐ No ✗

Compliance Assurance Monitoring (CAM) Plan Required? ☐ Yes ☐ No ✗

Authority for Requirement: 567 IAC 22.108(3)
IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. 567 IAC 22.108(9)"a"

2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. 567 IAC 22.105 (2)"h"(3)

3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. 567 IAC 22.108 (1)"b"

4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. 567 IAC 22.108 (14)

5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. 567 IAC 22.108 (9)"b"

6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. 567 IAC 22.108(15)"c"

G2. Permit Expiration

1. Except as provided in rule 567—22.104(455B), permit expiration terminates a source’s right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—22.105(455B). 567 IAC 22.116(2)

2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department to the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, Wallace State Office Building, 502 E 9th St., Des Moines, IA 50319-0034, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to U.S. EPA Region VII, Attention: Chief of Air Permitting & Standards Branch, 11201 Renner Blvd., Lenexa, KS 66219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). 567 IAC 22.105

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. 567 IAC 22.107 (4)
G4. Annual Compliance Certification
By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108 (15)"e"

G5. Semi-Annual Monitoring Report
By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 22.108 (5)

G6. Annual Fee
1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
4. The fee shall be submitted annually by July 1 with forms specified by the department.
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges
Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. 567 IAC 22.108 (15)"b"

**G8. Duty to Provide Information**

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. 567 IAC 22.108 (9)"e"

**G9. General Maintenance and Repair Duties**

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. 567 IAC 24.2(1)

**G10. Recordkeeping Requirements for Compliance Monitoring**

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
   a. The date, place and time of sampling or measurements
   b. The date the analyses were performed.
   c. The company or entity that performed the analyses.
   d. The analytical techniques or methods used.
   e. The results of such analyses; and
   f. The operating conditions as existing at the time of sampling or measurement.
   g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)

2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
a. Comply with all terms and conditions of this permit specific to each alternative scenario.

b. Maintain a log at the permitted facility of the scenario under which it is operating.

c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. 567 IAC 22.108(4), 567 IAC 22.108(12)

G11. Evidence used in establishing that a violation has or is occurring.
Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:
   a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
   b. Compliance test methods specified in 567 Chapter 25; or
   c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
   a. Any monitoring or testing methods provided in these rules; or
   b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. 567 IAC 21.5(1)-567 IAC 21.5(2)

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. 567 IAC 22.108(6)

G13. Hazardous Release
The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). 567 IAC Chapter 131-State Only

G14. Excess Emissions and Excess Emissions Reporting Requirements
1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the
incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting
   a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1) ) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:
      i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
      ii. The estimated quantity of the excess emission.
      iii. The time and expected duration of the excess emission.
      iv. The cause of the excess emission.
      v. The steps being taken to remedy the excess emission.
      vi. The steps being taken to limit the excess emission in the interim period.
   b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:
      i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
      ii. The estimated quantity of the excess emission.
      iii. The time and duration of the excess emission.
      iv. The cause of the excess emission.
      v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
vi. The steps that were taken to limit the excess emission.

vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 24.1(1)-567 IAC 24.1(4)

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The facility at the time was being properly operated;

c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and

d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." – See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. 567 IAC 22.108(16)

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). 567 IAC 22.108(5)"b"

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. 567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification
1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
   a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
   b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
   c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
   d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));
   e. The changes comply with all applicable requirements.
   f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
      i. A brief description of the change within the permitted facility,
      ii. The date on which the change will occur,
      iii. Any change in emission as a result of that change,
      iv. The pollutants emitted subject to the emissions trade
      v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
      vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
      vii. Any permit term or condition no longer applicable as a result of the change. 567 IAC 22.110(1)
2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. 567 IAC 22.110(2)
3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). 567 IAC 22.110(3)
4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. 567 IAC 22.110(4)
5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. 567 IAC 22.108(11)

G18. Duty to Modify a Title V Permit
1. Administrative Amendment.
   a. An administrative permit amendment is a permit revision that does any of the following:
      i. Correct typographical errors
      ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
      iii. Require more frequent monitoring or reporting by the permittee; or
      iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
   b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
   c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.
   a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
      i. Do not violate any applicable requirement;
      ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
      iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
      iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
      v. Are not modifications under any provision of Title I of the Act; and
      vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B).
   b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
      i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
      ii. The permittee's suggested draft permit;
      iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.
Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.
The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. 567 IAC 22.111-567 IAC 22.113
G19. Duty to Obtain Construction Permits
Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. 567 IAC 22.1(1)

G20. Asbestos
The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (567 IAC 23.1(3)"a"); training fires and controlled burning of a demolished building (567 IAC 23.2).

G21. Open Burning
The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. 567 IAC 23.2 except 23.2(3)"j"; 567 IAC 23.2(3)"j" - State Only

G22. Acid Rain (Title IV) Emissions Allowances
The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7)

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements
1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
   a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
   b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
   c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
   d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
   a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
   b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
   c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)

e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. 40 CFR part 82

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. 567 IAC 22.108(9)"c"

2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.

   a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
   b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
   c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. 567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"

3. A permit shall be reopened and revised under any of the following circumstances:

   a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. 567 IAC 22.114(1)

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. 567 IAC 22.114(2)

5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. 567 IAC 22.114(3)

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

   a. Such applicable requirements are included and are specifically identified in the permit; or
   b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

3. A permit shield shall not alter or affect the following:

   a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
   b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
   c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
   d. The ability of the department or the administrator to obtain information from the facility pursuant to the emission limit section 14 of the Act. 567 IAC 22.108 (18)

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to
other circumstances, and the remainder of this permit, shall not be affected by such finding. 567 IAC 22.108 (8)

G27. Property Rights
The permit does not convey any property rights of any sort, or any exclusive privilege. 567 IAC 22.108 (9) "d"

G28. Transferability
This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of 567 IAC 22.111(1). 567 IAC 22.111 (1) "d"
G29. Disclaimer
No review has been undertaken on the engineering aspects of the equipment or control
equipment other than the potential of that equipment for reducing air contaminant emissions.
567 IAC 22.3(3)"c"

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification
The permittee shall notify the department's stack test contact in writing not less than 30 days
before a required test or performance evaluation of a continuous emission monitor is performed
to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition.
Such notice shall include the time, the place, the name of the person who will conduct the test
and other information as required by the department. If the owner or operator does not provide
timely notice to the department, the department shall not consider the test results or performance
evaluation results to be a valid demonstration of compliance with applicable rules or permit
conditions. Upon written request, the department may allow a notification period of less than 30
days. At the department’s request, a pretest meeting shall be held not later than 15 days prior to
conducting the compliance demonstration. A testing protocol shall be submitted to the
department no later than 15 days before the owner or operator conducts the compliance
demonstration. A representative of the department shall be permitted to witness the tests. Results
of the tests shall be submitted in writing to the department's stack test contact in the form of a
comprehensive report within six weeks of the completion of the testing. Compliance tests
conducted pursuant to this permit shall be conducted with the source operating in a normal
manner at its maximum continuous output as rated by the equipment manufacturer, or the rate
specified by the owner as the maximum production rate at which the source shall be operated. In
cases where compliance is to be demonstrated at less than the maximum continuous output as
rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that
rating, the owner may submit evidence to the department that the source has been physically
altered so that capacity cannot be exceeded, or the department may require additional testing,
continuous monitoring, reports of operating levels, or any other information deemed necessary
by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:
Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-9526

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be
directed to the supervisor of the respective county air pollution program.
567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes
The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of
excessive build-up of air contaminants during air pollution episodes, thereby preventing the
occurrence of an emergency due to the effects of these contaminants on the health of persons.
567 IAC 26.1(1)
G32. Contacts List
The current address and phone number for reports and notifications to the EPA administrator is:
  Iowa Compliance Officer
  Air Branch
  Enforcement and Compliance Assurance Division
  U.S. EPA Region 7
  11201 Renner Blvd.
  Lenexa, KS 66219
  (913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:
  Chief, Air Quality Bureau
  Iowa Department of Natural Resources
  Wallace State Office Building
  502 E 9th St.
  Des Moines, IA  50319-0034
  (515) 725-8200

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

**Field Office 1**
1101 Commercial Court, Suite 10
Manchester, IA 52057
(563) 927-2640

**Field Office 2**
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

**Field Office 3**
1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

**Field Office 4**
1401 Sunnyside Lane
Atlantic, IA  50022
(712) 243-1934

**Field Office 5**
Wallace State Office Building
502 E 9th St.
Des Moines, IA  50319-0034
(515) 725-0268

**Field Office 6**
1023 West Madison Street
Washington, IA 52353-1623
(319) 653-2135

**Polk County Public Works Dept.**
Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

**Linn County Public Health**
Air Quality Branch
1020 6th St SE
Cedar Rapids, IA 52401
(319) 892-6000