**PUBLIC NOTICE**

The Iowa Department of Natural Resources (DNR) is proposing to issue a Title V Operating Permit to Zinpro Corporation. This facility is located at 800 East Lyons Street, Garner, IA 50438. DNR is currently reviewing a permit application submitted by Zinpro Corporation to operate their existing Prepared Feeds, NEC facility.

Zinpro Corporation is an area source subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart VVVVVV which requires the facility to apply for a Title V permit for the affected units. Therefore the facility is required to apply for a Title V permit and, under 567 Iowa Administrative Code 24.101(1)"c", only the NESHAP affected units at the facility must be covered by the Title V permit. This facility has the potential to emit the following air pollutants annually:

PM-2.5 (particulate matter 2.5 microns or less in diameter): 73.01 tons
PM-10 (particulate matter ten microns or less in diameter): 73.01 tons
Particulate Matter: 73.01 tons
Sulfur Dioxide: 0.09 tons
Nitrogen Oxides: 15.46 tons
Volatile Organic Compounds: 39.11 tons
Carbon Monoxide: 12.99 tons
Lead: 0.00 tons
Total Hazardous Air Pollutants: 24.00 tons, 9.00 tons (single HAP)

Based on the information provided in the Title V Operating Permit application, the DNR has made an initial determination that the facility meets all the applicable criteria for the issuance of an operating permit specified in 567 IAC 24.107.

A copy of the Public Notice is available for public inspection at the:

GARNER PUBLIC LIBRARY
416 STATE STREET
GARNER, IA 50438
Phone: 641-923-2850

These documents are also available on the Air Quality Bureau's website at: www.iowadnr.gov/titlev-draft

For additional information or for a copy of the draft permit or fact sheet contact:

DEREK WEDEMEIER
IOWA DEPARTMENT OF NATURAL RESOURCES - AIR QUALITY BUREAU
6200 PARK AVE, STE #200
DES MOINES, IOWA 50321
Phone: (515) 725-9520
E-mail: Derek.Wedemeier@dnr.iowa.gov

A complete record of the permit review, including the permit application and the draft permit, is available for public inspection Monday-Friday, 8:00 a.m. - 4:30 p.m., at the DNR address shown above.

The public comment period for the draft permit will run from June 11, 2026 through July 11, 2026. During the public comment period, anyone may submit written comments on the permit. Mail signed comments to Derek Wedemeier at the DNR address shown above. The beginning date of this public

comment period also serves as the beginning of the U.S. Environmental Protection Agency's (EPA) 45-day review period, provided the EPA does not seek a separate review period.

Written requests for a public hearing concerning the permit may also be submitted during the comment period. Any hearing request must state the person's interest in the subject matter, and the nature of the issues proposed to be raised at the hearing. DNR will hold a public hearing upon finding, on the basis of requests, a significant degree of relevant public interest in a draft permit. Mail hearing requests to Derek Wedemeier at the DNR address shown above.

DNR will keep a record of the issues raised during the public participation process, and will prepare written responses to all comments received. The comments and responses will be compiled into a responsiveness summary document. After the close of the public comment period, DNR will make a final decision on the permit application. The responsiveness summary and the final permit will be available to the public upon request.

Individuals with disabilities or limited English proficiency are encouraged to participate in all DNR activities, including submitting public comments. If a reasonable accommodation or language services are needed to participate, contact the Air Quality Bureau staff member listed or Relay Iowa TTY Service at 800-735-7942 in advance to advise them of your specific needs. DNR's language access and disability nondiscrimination plans are available at https://www.iowadnr.gov/about/nondiscrimination-accessibility-language-access.

# Iowa Department of Natural Resources
# Draft Title V Operating Permit

## Name of Permitted Facility: Zinpro Corporation
## Facility Location: 880 East Lyons Street, Garner, IA 50438
## Air Quality Operating Permit Number: 26-TV-00#
## Expiration Date: **DATE**
**Permit Renewal Application Deadline: **DATE****

**EIQ Number: 92-7009**
**Facility File Number: 41-02-010**

---

**Responsible Official**
**Name: Adam Hunter**
**Title: Plant Manager**
**Mailing Address:880 East Lyons Street, Garner, IA 50438**
**Phone #: (641) 923-7848**

**Permit Contact Person for the Facility**
**Name: Hailey Gorman**
**Title: Environmental Specialist**
**Mailing Address: 7500 Flying Cloud Drive Suite 800, Eden Prairie, MN 55344**
**Phone #: (952) 983-3851**

---

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 24, and is issued subject to the terms and conditions contained in this permit.

**For the Director of the Department of Natural Resources**

---

Corey McCoid, Supervisor of Air Operating Permits Section Date

# Table of Contents

## Abbreviations

acfm.....actual cubic feet per minute
CFR.....Code of Federal Regulation
CE .....control equipment
CEM.....continuous emission monitor
$^{o}$F .....degrees Fahrenheit
EIQ.....emissions inventory questionnaire
EP.....emission point
EU .....emission unit
gr./dscf .....grains per dry standard cubic foot
IAC.....Iowa Administrative Code
DNR .....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
$PM_{10}$ .....particulate matter ten microns or less in diameter
$PM_{2.5}$ .....particulate matter two and a half microns or less in diameter
$SO_2$ .....sulfur dioxide
$NO_x$ .....nitrogen oxides
VOC .....volatile organic compound
CO .....carbon monoxide
HAP.....hazardous air pollutant

# I. Facility Description and Equipment List

Facility Name: Zinpro Corporation
Permit Number: 26-TV-00#

Facility Description: Prepared Feeds (SIC 2048)

## Equipment List[(1)]

[(1)] Pursuant to 567 IAC 24.101(1)"c", any source that is required to obtain a Title V operating permit solely because of a NESHAP requirement, and which is not a major source, is required to obtain a Title V permit only for the emission unit(s) and related equipment causing the source to be subject to the Title V program. There are other emission units at this facility that are not included in the Title V operating permit.

| Emission Point | Emission Unit Number | Emission Unit Description | Construction Permit Number |
|---|---|---|---|
| EP 07(G) | EU 07 | Reactor No. 1 | 95-A-848-S2 |
| EP 08(H) | EU 08 | Reactor No. 2 | 97-A-521-S3 |
| EP 13(M) | EU 13 | Ring Dryer | 07-A-1269-S4 |
| EP 16(P) | EU 16A | Reactor No. 3 | 07-A-1272-S4 |
| | EU 16B | Reactor No. 4 | |
| EP 22(V) | EU 22A | Evaporator | 16-A-318-S2 |
| | EU 22B | P3 PCS Spray Dryer | |
| EP 28(AB) | EU 28 | Fluid Bed Dryer | 18-A-152-S2 |
| EP 30(AD) | EU 30A | Reactor No. 5 | 19-A-246-S3 |

# II. Plant-Wide Conditions

Facility Name: Zinpro Corporation
Permit Number: 26-TV-00#

Permit conditions are established in accord with 567 Iowa Administrative Code rule 24.108. When 567 IAC as amended May 15, 2024, and cited in this permit becomes State Implementation Plan (SIP) approved, it will supersede 567 IAC as amended February 8, 2023. Prior to May 15, 2024, all Title V rule citations in this Title V permit were found and cited in 567 IAC Chapter 22. During the period from May 15, 2024, to the date that 567 IAC as amended May 15, 2024, is approved into the SIP, both 567 IAC as amended May 15, 2024 and 567 IAC as amended February 8, 2023 form the legal basis for the applicable requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix C.

---

**Permit Duration**

The term of this permit is: Five (5) years from permit issuance
Commencing on: **DATE**
Ending on: **DATE**

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 24.110 - 24.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 24.115.

---

**Emission Limits**
*Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant required to be included in this Title V permit:*

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

Sulfur Dioxide ($SO_2$): 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"

Pollutant: Single HAP
Emission Limit(s): 9.0 tons/yr
Authority for Requirement: DNR Construction Permits 95-A-848-S2, 97-A-521-S3, 07-A-1269-S4, 07-A-1272-S4, 16-A-318-S2, 18-A-152-S2, 19-A-246-S3

Pollutant: Total HAP
Emission Limit(s): 24.0 tons/yr
Authority for Requirement: DNR Construction Permits 95-A-848-S2, 97-A-521-S3, 07-A-1269-S4, 07-A-1272-S4, 16-A-318-S2, 18-A-152-S2, 19-A-246-S3

**Plant-Wide Operational Limits & Reporting/Record keeping Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The total amount for each Single HAP (SHAP) emitted at Plant Number 41-02-010 shall not exceed 9.0 tons in any 12-month rolling period. The total amount of Total HAPs (THAPs) emitted at Plant Number 41-02-010 shall not exceed 24.0 tons in any 12-month rolling period. The owner or operator shall:
   (1) On a monthly basis, calculate and record the total amount of Single HAP and Total HAP emissions, in tons, from all sources (e.g., chemical processes, combustion, tanks, wastewater, etc.) at this facility during the previous month.
   (2) On a monthly basis, calculate and record the rolling 12-month total amount of Single HAP and Total HAP emissions, in tons, from all sources (e.g., chemical processes, combustion, tanks, wastewater, etc.) at this facility.

B. If the 12-month rolling total of any individual HAP emitted exceeds 7.2 tons, the owner or operator shall immediately begin keeping the following daily records:
   (1) The amount of emissions of each individual HAP from all sources at the facility, in tons.
   (2) The 365-day rolling total of the amount of emissions of each individual HAP from all sources at the facility, in tons.

   Daily calculations of individual HAP emissions shall continue until the 365-day rolling total of the amount of emissions of each individual HAP from all sources at the facility drops below 7.2 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of emissions of each individual HAP will cease per Condition B. If the emissions once again exceed 7.2 tons, daily recordkeeping will be required per Condition B.

C. If the 12-month rolling total of all cumulative HAP emissions exceeds 19.2 tons, the owner or operator shall immediately begin keeping the following daily records:
   (1) The amount of all cumulative HAP emissions from all sources at the facility, in tons.
   (2) The 365-day rolling total of the amount of cumulative HAP emissions from all sources at the facility, in tons.

   Daily calculations of all cumulative HAP emissions shall continue until the 365-day rolling total of the amount of all cumulative HAP emissions from all sources at the facility drops below 19.2 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of cumulative

HAP emissions will cease per Condition C. If the emissions once again exceed 19.2 tons, daily recordkeeping will be required per Condition C.

Authority for Requirement: DNR Construction Permits 95-A-848-S2, 97-A-521-S3, 07-A-1269-S4, 07-A-1272-S4, 16-A-318-S2, 18-A-152-S2, 19-A-246-S3

# III. Emission Point-Specific Conditions

Facility Name: Zinpro Corporation
Permit Number: 26-TV-00#

## Emission Point ID Number: EP 07(G)

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|---|---|---|---|---|---|
| EU 07 | Reactor No. 1 | CE 07A: Venturi Scrubber<br>CE 07B: Packed Bed Scrubber | Inorganic Acids, Amino Acids | 8,640 lb wet material/batch<br>7,800 lb dry material/batch | 95-A-848-S2 |

## 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 95-A-848-S2
567 IAC 23.3(2)"d"

[(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 ($PM_{10}$)
Emission Limit(s): 0.09 lb/hr
Authority for Requirement: DNR Construction Permit 95-A-848-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.09 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 95-A-848-S2
567 IAC 23.3(2)"a"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.17 lb/hr
Authority for Requirement: DNR Construction Permit 95-A-848-S2

Pollutant: Hydrochloric Acid (HCl)
Emission Limit(s): 0.58 lb/hr
Authority for Requirement: DNR Construction Permit 95-A-848-S2

Pollutant: Single HAP
Emission Limit(s): 0.02 lb/hr[(2)]
Authority for Requirement: DNR Construction Permit 95-A-848-S2
[(2)]Limit excludes Hydrochloric Acid (HCl) and metal HAP (including manganese, chromium, selenium, and cobalt).

See Plant-Wide Conditions for additional requirements.

**Operational Limits & Reporting/Record keeping Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall calculate HAP emissions from Reactor No. 1 (EU 07) using the following methodology:
   (1) Record the identification and the HAP content of each material added to Reactor No. 1 (EU 07).
   (2) Record the number of hours that Reactor No. 1 (EU 07) is operated on a daily basis.
      a. The owner or operator shall calculate metal HAP emissions from Reactor No. 1 (EU 07) in tons per month by multiplying the allowable hourly PM emission rate in the emission limits above by the HAP content of the material processed and the total number of hours the emission source operated during the month divided by 2,000 pounds.
      b. The owner or operator shall calculate HCl emissions from Reactor No. 1 (EU 07) in tons per month by multiplying the allowable hourly HCl emission rate in the emission limits above by the number of hours the emission source operated during the month divided by 2,000 pounds.
      c. The owner or operator shall calculate SHAP emissions for each HAP emitted from Reactor No. 1 (EU 07) in tons per month by multiplying the allowable hourly SHAP emission rate in emission limits listed above by the number of hours the emission source operated during the month divided by 2,000 pounds.
      d. The owner or operator shall calculate THAP emissions in tons per month from Reactor No. 1 (EU 07) by summing the metal HAP, HCl, and SHAP as specified in Condition A.(2)a., A.(2)b., and A.(2)c.

B. The owner or operator shall operate and maintain the Venturi Scrubber (CE 07A) and Packed Bed Scrubber (CE 07B) according to the manufacturer's specifications and maintenance schedule. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
   (1) The date and time any inspection and/or maintenance was performed on the control equipment;
   (2) Any issues identified during the inspection and the date each issue was resolved; and,
   (3) Any issues identified during the maintenance activities and the date each issue was resolved.

C. The owner or operator shall maintain a scrubber liquor (water) level for the Venturi Scrubber (CE 07A) and Packed Bed Scrubber (CE 07B) that is between 50 and 150 gallons based on the equipment design. The owner or operator shall establish an alarm setting for the purpose of initiating corrective action based on a scrubber liquor (water)

level of less than 50 gallons or greater than 150 gallons.

(1) The owner or operator shall monitor whether the scrubber liquor (water) level of the scrubbers is within the required range on a continuous basis.

(2) The owner or operator shall record whether the scrubber liquor (water) level of the scrubbers is within the required range at least once per calendar day. This requirement shall not apply on days when the emission units are not in operation.

(3) If the level deviates outside the minimum and maximum level required, then record the time, date, and actions taken to correct the situation to be between the minimum and maximum level required.

D. The pH of the liquor in the scrubbers shall be maintained above 6.5 at all times.

(1) The owner or operator shall monitor the pH of the scrubber liquor on a continuous basis.

(2) The owner or operator shall record the pH of the scrubber liquor for the scrubbers two times per calendar day at a minimum. This requirement shall not apply on days when the emission unit is not in operation.

(3) If the pH deviates below the pH required, then record the time, date, and actions taken to correct the situation and when the pH is back above the minimum pH required.

**NESHAP Subpart VVVVVV Requirements**

E. Per 40 CFR §63.11494(d), for CMPU using only Table 1 metal HAP, the owner or operator shall comply with the requirements of §63.11495 and, if applicable, §63.11496(f).

(1) Per 40 CFR §63.11495(a)(1), each process vessel must be equipped with a cover or lid that must be closed at all times when it is in metal HAP service, except for manual operations that require access, such as material addition and removal, inspection, sampling and cleaning. This requirement does not apply to process vessels containing only metal HAP that are in a liquid solution or other form that will not result in particulate emissions of metal HAP (e.g., metal HAP that is in ingot, paste, slurry, or moist pellet form or other form).

(2) Per 40 CFR §63.11495(a)(3), the owner or operator shall conduct inspections of process vessels and equipment for each CMPU in metal HAP service, as specified in paragraphs (a)(3)(i) through (v) of this section, to demonstrate compliance with paragraph (a)(1) of this section and to determine that the process vessels and equipment are sound and free of leaks.

a. Inspections must be conducted at least quarterly.

b. For these inspections, detection methods incorporating sight, sound, or smell are acceptable. Indications of a leak identified using such methods constitute a leak unless you demonstrate that the indications of a leak are due to a condition other than loss of HAP. If indications of a leak are determined not to be HAP in one quarterly monitoring period, you must still perform the inspection and demonstration in the next quarterly monitoring period.

c. Inspections must be conducted while the subject CMPU is operating.

d. No inspection is required in a calendar quarter during which the subject CMPU does not operate for the entire calendar quarter and is not in metal HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required.

(3) Per 40 CFR §63.11495(a)(4), the owner or operator must repair any leak within 15

calendar days after detection of the leak, or document the reason for any delay of repair. For the purposes of this paragraph (a)(4), a leak will be considered "repaired" if a condition specified in paragraph (a)(4)(i), (ii), or (iii) of this section is met.

a. The visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated, or
b. No bubbles are observed at potential leak sites during a leak check using soap solution, or
c. The system will hold a test pressure.

(4) Per 40 CFR §63.11495(a)(5), the owner or operator must keep records of the dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair.

(5) Per 40 CFR §63.11495(d), at all times, the owner or operator must operate and maintain any affected CMPU, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the CMPU.

F. The owner or operator shall comply with the requirements of notification, reporting, and recordkeeping, as specified in 40 CFR §63.11501 when using materials containing chromium or manganese.

**NESHAP Subpart DDDDDDD Requirements**

G. Per 40 CFR §63.11621(a), in all areas where material containing chromium or manganese are handled, the owner or operator shall comply with management practices by:

(1) Performing housekeeping measures to minimize excess dust. These measures must include, but not be limited to, the practices specified below.

a. You must use either an industrial vacuum system or manual sweeping to reduce the amount of dust;
b. At least once per month, you must remove dust from walls, ledges, and equipment using low pressure air or by other means, and then sweep or vacuum the area;
c. You must keep exterior doors in the immediate affected areas shut except during normal ingress and egress, as practicable. This paragraph [40 CFR §63.11621(a)(1)(iii)] does not apply to areas where finished product is stored in closed containers, and no other materials containing chromium or manganese are present.

(2) Maintaining and operating all process equipment in accordance with manufacturer's specifications and in a manner to minimize dust creation; and,

(3) The owner or operator shall keep records of the dust minimizing procedures used at the facility.

H. Per 40 CFR §63.11621(b), the owner or operator shall store any raw material containing chromium or manganese in closed containers.

I. Per 40 CFR §63.11621(c), the mixer where materials containing chromium or manganese are added must be covered at all times when mixing is occurring, except when the materials are being added to the mixer. Materials containing chromium or manganese

must be added to the mixer in a manner that minimizes emissions.

J. The owner or operator shall comply with the requirements of notification, reporting and recordkeeping, as specified in 40 CFR §63.11624 when using materials containing chromium or manganese.

Authority for Requirement: 40 CFR 63 Subpart VVVVVV
567 IAC 23.1(4)"ev"
40 CFR 63 Subpart DDDDDDD
567 IAC 23.1(4)"fd"

See Plant-Wide Conditions for additional requirements.

**Emission Point Characteristics**

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

Stack Height, (ft., from the ground): 25
Stack Opening, (inches, dia.): 4
Exhaust Flow Rate (scfm): 100
Exhaust Temperature (°F): 70
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 95-A-848-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 24.108(3)

## Emission Point ID Number: EP 08(H)

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|---|---|---|---|---|---|
| EU 08 | Reactor No. 2 | CE 08A: Venturi Scrubber<br>CE 08B: Packed Bed Scrubber | Inorganic Acids, Amino Acids | 12,700 lb wet material/batch<br>11,440 lb dry material/batch | 97-A-521-S3 |

## 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 97-A-521-S3
567 IAC 23.3(2)"d"

[(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 ($PM_{10}$)
Emission Limit(s): 0.17 lb/hr
Authority for Requirement: DNR Construction Permit 97-A-521-S3

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.17 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 97-A-521-S3
567 IAC 23.3(2)"a"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.17 lb/hr
Authority for Requirement: DNR Construction Permit 97-A-521-S3

Pollutant: Hydrochloric Acid (HCl)
Emission Limit(s): 0.58 lb/hr
Authority for Requirement: DNR Construction Permit 97-A-521-S3

Pollutant: Single HAP
Emission Limit(s): 0.02 lb/hr[(2)]
Authority for Requirement: DNR Construction Permit 97-A-521-S3

[(2)]Limit excludes Hydrochloric Acid (HCl) and metal HAP (including manganese, chromium, selenium, and cobalt).

See Plant-Wide Conditions for additional emission limit requirements.

**Operational Limits & Reporting/Record keeping Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall calculate HAP emissions from Reactor No. 2 (EU 08) using the following methodology:
   (1) Record the identification and the HAP content of each material added to Reactor No. 2 (EU 08).
   (2) Record the number of hours that Reactor No. 2 (EU 08) is operated on a daily basis.
      a. The owner or operator shall calculate metal HAP emissions from Reactor No. 2 (EU 08) in tons per month by multiplying the allowable hourly PM emission rate in the emission limits above by the HAP content of the material processed and the total number of hours the emission source operated during the month divided by 2,000 pounds.
      b. The owner or operator shall calculate HCl emissions from Reactor No. 2 (EU 08) in tons per month by multiplying the allowable hourly HCl emission rate listed in the emission limits above by the number of hours the emission source operated during the month divided by 2,000 pounds.
      c. The owner or operator shall calculate SHAP emissions for each HAP emitted from Reactor No. 2 (EU 08) in tons per month by multiplying the allowable hourly SHAP emission rate in the emission limits above by the number of hours the emission source operated during the month divided by 2,000 pounds.
      d. The owner or operator shall calculate THAP emissions in tons per month from Reactor No. 2 (EU 08) by summing the metal HAP, HCl, and SHAP as specified in Condition A.(2)a., A.(2)b., and A.(2)c.

B. The owner or operator shall operate and maintain the Venturi Scrubber (CE 08A) and Packed Bed Scrubber (CE 08B) according to the manufacturer's specifications and maintenance schedule. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
   (1) The date and time any inspection and/or maintenance was performed on the control equipment;
   (2) Any issues identified during the inspection and the date each issue was resolved; and,
   (3) Any issues identified during the maintenance activities and the date each issue was resolved.

C. The owner or operator shall maintain a scrubber liquor (water) level for the Venturi Scrubber (CE 08A) and Packed Bed Scrubber (CE 08B) that is between 50 and 150 gallons based on the equipment design. The owner or operator shall establish an alarm setting for the purpose of initiating corrective action based on a scrubber liquor (water) level of less than 50 gallons or greater than 150 gallons.
   (1) The owner or operator shall monitor whether the scrubber liquor (water) level of the scrubbers is within the required range on a continuous basis.
   (2) The owner or operator shall record whether the scrubber liquor (water) level of the

scrubbers is within the required range at least once per calendar day. This requirement shall not apply on days when the emission units are not in operation.

(3) If the level deviates outside the minimum and maximum level required, then record the time, date, and actions taken to correct the situation to be between the minimum and maximum level required.

D. The pH of the liquor in the scrubbers shall be maintained above 6.5 at all times.

(1) The owner or operator shall monitor the pH of the scrubber liquor on a continuous basis.

(2) The owner or operator shall record the pH of the scrubber liquor for the scrubbers two times per calendar day at a minimum. This requirement shall not apply on days when the emission unit is not in operation.

(3) If the pH deviates below the pH required, then record the time, date, and actions taken to correct the situation and when the pH is back above the minimum pH required.

**NESHAP Subpart VVVVVV Requirements**

E. Per 40 CFR §63.11494(d), for CMPU using only Table 1 metal HAP, the owner or operator shall comply with the requirements of §63.11495 and, if applicable, §63.11496(f).

(1) Per 40 CFR §63.11495(a)(1), each process vessel must be equipped with a cover or lid that must be closed at all times when it is in metal HAP service, except for manual operations that require access, such as material addition and removal, inspection, sampling and cleaning. This requirement does not apply to process vessels containing only metal HAP that are in a liquid solution or other form that will not result in particulate emissions of metal HAP (e.g., metal HAP that is in ingot, paste, slurry, or moist pellet form or other form).

(2) Per 40 CFR §63.11495(a)(3), the owner or operator shall conduct inspections of process vessels and equipment for each CMPU in metal HAP service, as specified in paragraphs (a)(3)(i) through (v) of this section, to demonstrate compliance with paragraph (a)(1) of this section and to determine that the process vessels and equipment are sound and free of leaks.

a. Inspections must be conducted at least quarterly.

b. For these inspections, detection methods incorporating sight, sound, or smell are acceptable. Indications of a leak identified using such methods constitute a leak unless you demonstrate that the indications of a leak are due to a condition other than loss of HAP. If indications of a leak are determined not to be HAP in one quarterly monitoring period, you must still perform the inspection and demonstration in the next quarterly monitoring period.

c. Inspections must be conducted while the subject CMPU is operating.

d. No inspection is required in a calendar quarter during which the subject CMPU does not operate for the entire calendar quarter and is not in metal HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required.

(3) Per 40 CFR §63.11495(a)(4), the owner or operator must repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair. For the purposes of this paragraph (a)(4), a leak will be considered "repaired" if a condition specified in paragraph (a)(4)(i), (ii), or (iii) of this section is met.

a. The visual, audible, olfactory, or other indications of a leak to the atmosphere

have been eliminated, or
b. No bubbles are observed at potential leak sites during a leak check using soap solution, or
c. The system will hold a test pressure.

(4) Per 40 CFR §63.11495(a)(5), the owner or operator must keep records of the dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair.

(5) Per 40 CFR §63.11495(d), at all times, the owner or operator must operate and maintain any affected CMPU, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the CMPU.

F. The owner or operator shall comply with the requirements of notification, reporting, and recordkeeping, as specified in 40 CFR §63.11501 when using materials containing chromium or manganese.

**NESHAP Subpart DDDDDDD Requirements**

G. Per 40 CFR §63.11621(a), in all areas where material containing chromium or manganese are handled, the owner or operator shall comply with management practices by:

(1) Performing housekeeping measures to minimize excess dust. These measures must include, but not be limited to, the practices specified below.
a. You must use either an industrial vacuum system or manual sweeping to reduce the amount of dust;
b. At least once per month, you must remove dust from walls, ledges, and equipment using low pressure air or by other means, and then sweep or vacuum the area;
c. You must keep exterior doors in the immediate affected areas shut except during normal ingress and egress, as practicable. This paragraph [40 CFR §63.11621(a)(1)(iii)] does not apply to areas where finished product is stored in closed containers, and no other materials containing chromium or manganese are present.

(2) Maintaining and operating all process equipment in accordance with manufacturer's specifications and in a manner to minimize dust creation; and,

(3) The owner or operator shall keep records of the dust minimizing procedures used at the facility.

H. Per 40 CFR §63.11621(b), the owner or operator shall store any raw material containing chromium or manganese in closed containers.

I. Per 40 CFR §63.11621(c), the mixer where materials containing chromium or manganese are added must be covered at all times when mixing is occurring, except when the materials are being added to the mixer. Materials containing chromium or manganese must be added to the mixer in a manner that minimizes emissions.

J. The owner or operator shall comply with the requirements of notification, reporting and recordkeeping, as specified in 40 CFR §63.11624 when using materials containing chromium or manganese.

Authority for Requirement: DNR Construction Permit 97-A-521-S3
40 CFR 63 Subpart VVVVVV
567 IAC 23.1(4)"ev"
40 CFR 63 Subpart DDDDDDD
567 IAC 23.1(4)"fd"

See Plant-Wide Conditions for additional requirements.

**Emission Point Characteristics**

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

Stack Height, (ft., from the ground): 31.5
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): 200
Exhaust Temperature (°F): 70
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 97-A-521-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 24.108(3)

## Emission Point ID Number: EP 13(M)

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|---|---|---|---|---|---|
| EU 13 | Ring Dryer with Product Recovery Cyclones | CE 13B: Thermal Oxidizer 27 MMBtu/hr | Livestock Feed Additive Slurry Natural Gas | 16,000 lb dry product/hr 30 MMBtu/hr | 07-A-1269-S4 |

## 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 07-A-1269-S4
567 IAC 23.3(2)"d"

[(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 ($PM_{10}$)
Emission Limit(s): 13.62 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-1269-S4

Pollutant: Particulate Matter (PM)
Emission Limit(s): 13.62 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 07-A-1269-S4
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide ($SO_2$)
Emission Limit(s): 500 $ppm_v$
Authority for Requirement: DNR Construction Permit 07-A-1269-S4
567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 4.5 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-1269-S4

Pollutant: Single HAP
Emission Limit(s): 1.0 lb/hr[(2)]
Authority for Requirement: DNR Construction Permit 07-A-1269-S4

[(2)]Limit excludes metal HAP (including manganese, chromium, selenium, and cobalt).

See Plant-Wide Conditions for additional requirements.

**Operational Limits & Reporting/Record keeping Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The total mass of dry product processed by this unit shall not exceed 14,000 pounds per hour on a per-batch average. For each batch, the owner or operator shall record:
   (1) The total mass of dry product processed (pounds) and the total hours of operation for the unit (hours).
   (2) The calculated average hourly processing rate (lb/hr), determined by dividing the total mass processed by the total hours of operation for that batch.
B. In accordance with Administrative Consent Order (ACO) No. 2025-AQ-18 dated December 12, 2025: This emission unit shall not process/dry the "Availa Cu" product.
C. The owner or operator shall maintain a record of all final products processed in this emission unit. This shall include the date that each product was first processed and the date (if any) that production was ceased of each product.
   (1) On a monthly basis, the owner or operator shall maintain a record of the hours of operation of this emission unit for each product, and calculate and record the 12-month rolling average.
   (2) The owner or operator shall determine the "primary" product processed in this emission unit by determining which product is processed for the highest number of the total hours of operation during the previous 12-month rolling average period.
D. The Ring Dryer (EU 13) and Thermal Oxidizer (CE 13B) shall be limited to firing natural gas only.
   (1) The owner or operator shall keep records indicating the type of fuel burned in the unit (e.g., fuel invoices).
E. The owner or operator shall operate, inspect, and maintain the Product Recovery Cyclones and Thermal Oxidizer (CE 13B) according to the Department approved Operations and Maintenance (O&M) Plan. Any requested changes to this plan must be submitted to the Department for review. At a minimum, the owner or operator shall perform quarterly inspections of the cyclones and thermal oxidizer for corrosion, erosion, or any other damage that could result in air in-leakage. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
   (1) The date and time any inspection and/or maintenance was performed on the control equipment;
   (2) Any issues identified during the inspection and the date each issue was resolved; and,
   (3) Any issues identified during the maintenance activities and the date each issue was resolved.
F. The owner or operator shall maintain a 3-hour average air flow rate of the Product Recovery Cyclones within the range of 37,000 SCFM to 48,750 SCFM.
   (1) The owner or operator shall properly install, operate, and maintain equipment to continuously monitor the air flow rate of the cyclone system. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

(2) The owner or operator shall collect and record the air flow rate of the Product Recovery Cyclones at a minimum of once an hour and calculate and record the 3-hour block average. The 3-hour block average shall be calculated using all data points collected during the averaging period.
(3) If the 3-hour block average air flow rate is not within the range listed above, the owner or operator shall record the time, date, and actions taken to correct the situation and shall record when the exhaust flow rate is back within the required range. These requirements shall not apply during periods of startup/shutdown and on days that the Product Recovery Cyclones or the equipment that the cyclones control is not in operation.

G. The owner or operator shall maintain the operating temperature of the Thermal Oxidizer (TO) (CE 13B) at or above the average operating temperature recorded for the TO during the most recent performance test that demonstrated compliance with the emission limits as specified in the emission limits above
(1) The owner or operator shall maintain onsite a copy of the most recent performance test(s) that demonstrated compliance with the emission limits specified above along with the recorded TO operating temperatures.
(2) The owner or operator shall collect and record the temperature of the TO (CE 13B) at a minimum of once per shift.
(3) If the temperature falls below the value specified above, the owner or operator shall investigate the Thermal Oxidizer (CE 13B) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. These requirements shall not apply on days that Thermal Oxidizer (CE 13B) or the equipment that this TO controls is not in operation.

H. The owner or operator shall calculate HAP emissions from the Ring Dryer (EU 13) to be included in the compliance demonstration with the tons per year emission limit using the following methodology:
(1) Record the identification and the HAP content of each material added to the Ring Dryer (EU 13).
(2) Record the number of hours that the Ring Dryer (EU 13) is operated on a daily basis.
a. The owner or operator shall calculate metal HAP emissions from the Ring Dryer (EU 13) in tons per month by multiplying the allowable hourly PM emission rate listed in the emission limits above by the HAP content of the material processed and the total number of hours the emission source operated during the month divided by 2,000 pounds.
b. The owner or operator shall calculate SHAP emissions for each HAP emitted from the Ring Dryer (EU 13) in tons per month by multiplying the allowable hourly SHAP emission rate listed in the emission limits above by the number of hours the emission source operated during the month divided by 2,000 pounds.
c. The owner or operator shall calculate THAP emissions in tons per month from the Ring Dryer (EU 13) by summing the metal HAP and SHAP as specified in Condition H.(2)a. and H.(2)b.

**NESHAP Subpart VVVVVV Requirements**

I. Per 40 CFR §63.11494(d), for CMPU using only Table 1 metal HAP, the owner or operator shall comply with the requirements of §63.11495 and, if applicable, §63.11496(f).
   (1) Per 40 CFR §63.11495(a)(3), the owner or operator shall conduct inspections of process vessels and equipment for each CMPU in metal HAP service, as specified in paragraphs (a)(3)(i) through (v) of this section, to demonstrate compliance with paragraph (a)(1) of this section and to determine that the process vessels and equipment are sound and free of leaks.
      a. Inspections must be conducted at least quarterly.
      b. For these inspections, detection methods incorporating sight, sound, or smell are acceptable. Indications of a leak identified using such methods constitute a leak unless you demonstrate that the indications of a leak are due to a condition other than loss of HAP. If indications of a leak are determined not to be HAP in one quarterly monitoring period, you must still perform the inspection and demonstration in the next quarterly monitoring period.
      c. Inspections must be conducted while the subject CMPU is operating.
      d. No inspection is required in a calendar quarter during which the subject CMPU does not operate for the entire calendar quarter and is not in metal HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required.
   (2) Per 40 CFR §63.11495(a)(4), the owner or operator must repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair. For the purposes of this paragraph (a)(4), a leak will be considered "repaired" if a condition specified in paragraph (a)(4)(i), (ii), or (iii) of this section is met.
      a. The visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated, or
      b. No bubbles are observed at potential leak sites during a leak check using soap solution, or
      c. The system will hold a test pressure.
   (3) Per 40 CFR §63.11495(a)(5), the owner or operator must keep records of the dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair.
   (4) Per 40 CFR §63.11495(d), at all times, the owner or operator must operate and maintain any affected CMPU, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.
   (5) Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the CMPU.

J. The owner or operator shall comply with the requirements of notification, reporting, and recordkeeping, as specified in 40 CFR §63.11501 when using materials containing chromium or manganese.

**NESHAP Subpart DDDDDDD Requirements**

K. Per 40 CFR §63.11621(a), in all areas where material containing chromium or manganese

are handled, the owner or operator shall comply with management practices by:

(1) Performing housekeeping measures to minimize excess dust. These measures must include, but not be limited to, the practices specified below.
   a. You must use either an industrial vacuum system or manual sweeping to reduce the amount of dust;
   b. At least once per month, you must remove dust from walls, ledges, and equipment using low pressure air or by other means, and then sweep or vacuum the area;
   c. You must keep exterior doors in the immediate affected areas shut except during normal ingress and egress, as practicable. This paragraph [40 CFR §63.11621(a)(1)(iii)] does not apply to areas where finished product is stored in closed containers, and no other materials containing chromium or manganese are present.

(2) Maintaining and operating all process equipment in accordance with manufacturer's specifications and in a manner to minimize dust creation; and,

(3) The owner or operator shall keep records of the dust minimizing procedures used at the facility.

L. Per 40 CFR §63.11621(b), the owner or operator shall store any raw material containing chromium or manganese in closed containers.

M. The owner or operator shall comply with the requirements of notification, reporting and recordkeeping, as specified in 40 CFR §63.11624 when using materials containing chromium or manganese.

Authority for Requirement: DNR Construction Permit 07-1269-S4
40 CFR 63 Subpart VVVVVV
567 IAC 23.1(4)"ev"
40 CFR 63 Subpart DDDDDDD
567 IAC 23.1(4)"fd"

See Plant-Wide Conditions for additional requirements.

**Emission Point Characteristics**

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

Stack Height, (ft., from the ground): 40
Stack Opening, (inches, dia.): 60
Exhaust Flow Rate (scfm): 41,000
Exhaust Temperature (°F): 390
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 07-A-1269-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.*

**Compliance Demonstration Table**

| Pollutant | Compliance Methodology | Frequency | Test Run Time | Test Method |
|---|---|---|---|---|
| PM – State | Stack Test[1] | Initial, Annually[2][3] | 1 hour | 40 CFR 60, Appendix A, Method 5<br>40 CFR 51, Appendix M, Method 202 |
| $PM_{10}$ | Stack Test[1] | Initial, Annually[2][3] | 1 hour | 40 CFR 51, Appendix M, 201A with 202 |
| VOC[4] | Stack Test[1] | Initial, Annually[2][3] | 1 hour | 40 CFR 63, Appendix A, Method 320 or<br>40 CFR 60, Appendix A, Method 18 |
| HAP[4][5] | Stack Test[1] | Initial, Annually[2][3][6] | 1 hour | 40 CFR 63, Appendix A, Method 320 or<br>40 CFR 60, Appendix A, Method 18 |

[1]Stack testing shall be completed at the maximum capacity as stated in Operational Requirement A, listed above.

[2]The owner or operator shall complete stack testing once per calendar year when processing the "primary" product as determined by Operational Requirement C., listed above. The most recent stack test that demonstrated compliance with the VOC and HAP emission limits was completed on October 23, 2024. The most recent stack test that demonstrated compliance with the PM emission limits was completed on May 13, 2025. The required initial compliance demonstration shall satisfy the next annual compliance demonstration. Testing shall be completed with a minimum of 90 days between tests.

[3]In accordance with Administrative Consent Order (ACO) No. 2025-AQ-18 dated December 12, 2025: Annual stack testing shall remain in place until three consecutive tests demonstrate compliance with the applicable emission limits for each pollutant. If three consecutive annual tests demonstrate compliance for a pollutant then the owner or operator may submit a construction permit application to reduce the annual testing requirement for the passing pollutant.

[4]A pretest survey shall be conducted using Method 207 (or other approved method) to determine VOC/HAP compounds present in the exhaust stream. In addition to the compounds detected in the pretest survey, formaldehyde and acetaldehyde shall be tested for specifically. Alternative approaches shall be included in the test protocol for DNR approval. The pretest survey shall be completed for each new product that is processed in this emission unit during a compliance test. The owner or operator may elect to use previous pretest survey results for products that were previously tested during a passing test, so long as the facility does not decrease the Thermal Oxidizer (CE 13B) operating temperature that was established during the previous test.

[5]All compounds identified in the pretest survey required in footnote 4 (including formaldehyde and acetaldehyde) that test below the detection limit shall be assumed to be emitting at a rate equal to the Method 320 or 18 detection limits.

[6]The stack testing requirement applies to the lb/hr emission limit listed above.

Authority for Requirement: DNR Construction Permit 07-A-1269-S4

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 21.10(7)

**Agency Approved Operation & Maintenance Plan Required?** **Yes** ☒ **No** ☐
O&M Plan required by ACO 2025-AQ-18 and DNR Construction Permit 07-A-126-S4. This is located in Appendix B.
**Facility Maintained Operation & Maintenance Plan Required?** **Yes** ☐ **No** ☒

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

Authority for Requirement: 567 IAC 24.108(3)

## Emission Point ID Number: EP 16(P)

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity (each) | Construction Permit |
|---|---|---|---|---|---|
| EU 16A | Reactor No. 3 | CE 16A: Venturi Scrubber<br>CE 16B: Packed Bed Scrubber | Inorganic Acids, Amino Acids | 18,000 lb wet material/batch<br>18,000 lb dry material/batch | 07-A-1272-S4 |
| EU 16B | Reactor No. 4 | | | | |

## 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 07-A-1272-S4
567 IAC 23.3(2)"d"

[(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 ($PM_{10}$)
Emission Limit(s): 0.07 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-1272-S4

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.07 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 07-A-1272-S4
567 IAC 23.3(2)"a"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.81 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-1272-S4

Pollutant: Hydrochloric Acid (HCl)
Emission Limit(s): 1.60 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-1272-S4

Pollutant: Single HAP
Emission Limit(s): 0.11 lb/hr[(2)]
Authority for Requirement: DNR Construction Permit 07-A-1272-S4

[(2)]Limit excludes Hydrochloric Acid (HCl) and metal HAP (including manganese, chromium, selenium, and cobalt).

See Plant-Wide Conditions for additional requirements.

**Operational Limits & Reporting/Record keeping Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall calculate HAP emissions from Reactors No. 3 (EU 16A) and No. 4 (EU 16B) using the following methodology:
   (1) Record the identification and the HAP content of each material added to Reactors No. 3 (EU 16A) and No. 4 (EU 16B).
   (2) Record the number of hours that Reactors No. 3 (EU 16A) and No. 4 (EU 16B) are operated on a daily basis.
      a. The owner or operator shall calculate metal HAP emissions from Reactors No. 3 (EU 16A) and No. 4 (EU 16B) in tons per month by multiplying the allowable hourly PM emission rate in the emission limits above by the HAP content of the material processed and the total number of hours the emission source operated during the month divided by 2,000 pounds.
      b. The owner or operator shall calculate HCl emissions from Reactors No. 3 (EU 16A) and No. 4 (EU 16B) in tons per month by multiplying the allowable hourly HCl emission rate in the emission limits section above by the number of hours the emission source operated during the month divided by 2,000 pounds.
      c. The owner or operator shall calculate SHAP emissions for each HAP emitted from Reactors No. 3 (EU 16A) and No. 4 (EU 16B) in tons per month by multiplying the allowable hourly SHAP emission rate in the emission limits section above by the number of hours the emission source operated during the month divided by 2,000 pounds.
      d. The owner or operator shall calculate THAP emissions in tons per month from Reactors No. 3 (EU 16A) and No. 4 (EU 16B) by summing the metal HAP, HCl, and SHAP as specified in Condition A.(2)a., A.(2)b., and A.(2)c.

B. The owner or operator shall operate and maintain the Venturi Scrubber (CE 16A) and Packed Bed Scrubber (CE 16B) according to the manufacturer's specifications and maintenance schedule. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
   (1) The date and time any inspection and/or maintenance was performed on the control equipment;
   (2) Any issues identified during the inspection and the date each issue was resolved; and,
   (3) Any issues identified during the maintenance activities and the date each issue was resolved.

C. The owner or operator shall maintain a scrubber liquor (water) level for the Venturi Scrubber (CE 16A) and Packed Bed Scrubber (CE 16B) that is between 125 and 380 gallons based on the equipment design. The owner or operator shall establish an alarm setting for the purpose of initiating corrective action based on a scrubber liquor (water) level of less than 125 gallons or greater than 380 gallons.
   (1) The owner or operator shall monitor whether the scrubber liquor (water) level of the

scrubbers is within the required range on a continuous basis.

(2) The owner or operator shall record whether the scrubber liquor (water) level of the scrubbers is within the required range at least once per calendar day. This requirement shall not apply on days when the emission units are not in operation.

(3) If the level deviates outside the minimum and maximum level required, then record the time, date, and actions taken to correct the situation to be between the minimum and maximum level required.

D. The pH of the liquor in the scrubbers shall be maintained above 6.5 at all times.

(1) The owner or operator shall monitor the pH of the scrubber liquor on a continuous basis.

(2) The owner or operator shall record the pH of the scrubber liquor for the scrubbers two times per calendar day at a minimum. This requirement shall not apply on days when the emission unit is not in operation.

(3) If the pH deviates below the pH required, then record the time, date, and actions taken to correct the situation and when the pH is back above the minimum pH required.

**NESHAP Subpart VVVVVV Requirements**

E. Per 40 CFR §63.11494(d), for CMPU using only Table 1 metal HAP, the owner or operator shall comply with the requirements of §63.11495 and, if applicable, §63.11496(f).

(1) Per 40 CFR §63.11495(a)(1), each process vessel must be equipped with a cover or lid that must be closed at all times when it is in metal HAP service, except for manual operations that require access, such as material addition and removal, inspection, sampling and cleaning. This requirement does not apply to process vessels containing only metal HAP that are in a liquid solution or other form that will not result in particulate emissions of metal HAP (e.g., metal HAP that is in ingot, paste, slurry, or moist pellet form or other form).

(2) Per 40 CFR §63.11495(a)(3), the owner or operator shall conduct inspections of process vessels and equipment for each CMPU in metal HAP service, as specified in paragraphs (a)(3)(i) through (v) of this section, to demonstrate compliance with paragraph (a)(1) of this section and to determine that the process vessels and equipment are sound and free of leaks.

a. Inspections must be conducted at least quarterly.

b. For these inspections, detection methods incorporating sight, sound, or smell are acceptable. Indications of a leak identified using such methods constitute a leak unless you demonstrate that the indications of a leak are due to a condition other than loss of HAP. If indications of a leak are determined not to be HAP in one quarterly monitoring period, you must still perform the inspection and demonstration in the next quarterly monitoring period.

c. Inspections must be conducted while the subject CMPU is operating.

d. No inspection is required in a calendar quarter during which the subject CMPU does not operate for the entire calendar quarter and is not in metal HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required.

(3) Per 40 CFR §63.11495(a)(4), the owner or operator must repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair. For the purposes of this paragraph (a)(4), a leak will be considered "repaired"

if a condition specified in paragraph (a)(4)(i), (ii), or (iii) of this section is met.

a. The visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated, or
b. No bubbles are observed at potential leak sites during a leak check using soap solution, or
c. The system will hold a test pressure.

(4) Per 40 CFR §63.11495(a)(5), the owner or operator must keep records of the dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair.

(5) Per 40 CFR §63.11495(d), at all times, the owner or operator must operate and maintain any affected CMPU, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the CMPU.

F. The owner or operator shall comply with the requirements of notification, reporting, and recordkeeping, as specified in 40 CFR §63.11501 when using materials containing chromium or manganese.

**NESHAP Subpart DDDDDDD Requirements**

G. Per 40 CFR §63.11621(a), in all areas where material containing chromium or manganese are handled, the owner or operator shall comply with management practices by:

(1) Performing housekeeping measures to minimize excess dust. These measures must include, but not be limited to, the practices specified below.

a. You must use either an industrial vacuum system or manual sweeping to reduce the amount of dust;
b. At least once per month, you must remove dust from walls, ledges, and equipment using low pressure air or by other means, and then sweep or vacuum the area;
c. You must keep exterior doors in the immediate affected areas shut except during normal ingress and egress, as practicable. This paragraph [40 CFR §63.11621(a)(1)(iii)] does not apply to areas where finished product is stored in closed containers, and no other materials containing chromium or manganese are present.

(2) Maintaining and operating all process equipment in accordance with manufacturer's specifications and in a manner to minimize dust creation; and,

(3) The owner or operator shall keep records of the dust minimizing procedures used at the facility.

H. Per 40 CFR §63.11621(b), the owner or operator shall store any raw material containing chromium or manganese in closed containers.

I. Per 40 CFR §63.11621(c), the mixer where materials containing chromium or manganese are added must be covered at all times when mixing is occurring, except when the materials are being added to the mixer. Materials containing chromium or manganese must be added to the mixer in a manner that minimizes emissions.

J. The owner or operator shall comply with the requirements of notification, reporting and

recordkeeping, as specified in 40 CFR §63.11624 when using materials containing chromium or manganese.

Authority for Requirement: DNR Construction Permit 07-A-1272-S4
40 CFR 63 Subpart VVVVVV
567 IAC 23.1(4)"ev"
40 CFR 63 Subpart DDDDDDD
567 IAC 23.1(4)"fd"

See Plant-Wide Conditions for additional requirements.

**Emission Point Characteristics**

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

Stack Height, (ft., from the ground): 16
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 90
Exhaust Temperature (°F): 80
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 07-A-1272-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 24.108(3)

## Emission Point ID Number: EP 22(V)

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|---|---|---|---|---|---|
| EU 22A | Evaporator | CE 22C: Thermal Oxidizer | Livestock Feed Additive | 11,380 lbs wet feed/hr | 16-A-318-S2 |
| EU 22B | P3 PCS Spray Dryer | CE 22A: PCS Cyclone<br>CE 22B: PCS Venturi Scrubber<br>CE 22C: Thermal Oxidizer | Livestock Feed Additive | 6,000 lbs dry product/hr, 3.0 MMBtu/hr of 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%[(1)]
Authority for Requirement: DNR Construction Permit 16-A-318-S2
567 IAC 23.3(2)"d"

[(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 ($PM_{2.5}$)
Emission Limit(s): 1.53 lb/hr
Authority for Requirement: DNR Construction Permit 16-A-318-S2

Pollutant: Particulate Matter ($PM_{10}$)
Emission Limit(s): 1.53 lb/hr
Authority for Requirement: DNR Construction Permit 16-A-318-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.53 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 16-A-318-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide ($SO_2$)
Emission Limit(s): 500 $ppm_v$
Authority for Requirement: DNR Construction Permit 16-A-318-S2
567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 2.0 lb/hr
Authority for Requirement: DNR Construction Permit 16-A-318-S2

Pollutant: Single HAP
Emission Limit(s): 0.22 lb/hr[(2)]
Authority for Requirement: DNR Construction Permit 16-A-318-S2
[(2)] Limit excludes metal HAP (including manganese, chromium, selenium, and cobalt).

See Plant-Wide Conditions for additional requirements.

**Operational Limits & Reporting/Record keeping Requirements**
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall calculate HAP emissions from the P3 PCS Spray Dryer (EU 22B) using the following methodology:
   (1) Record the identification and the HAP content of each material added to the P3 PCS Spray Dryer (EU 22B).
   (2) Record the number of hours the P3 PCS Spray Dryer (EU 22B) is operated on a daily basis.
      a. The owner or operator shall calculate metal HAP emissions from the P3 PCS Spray Dryer (EU 22B) in tons per month by multiplying the allowable hourly PM emission rate in in the emission limits above by the HAP content of the material processed and the total number of hours the emission source operated during the month divided by 2,000 pounds.
      b. The owner or operator shall calculate SHAP emissions from the P3 PCS Spray Dryer (EU 22B) in tons per month by multiplying the allowable hourly SHAP emission rate in the emission limits above by the number of hours the emission source operated during the month divided by 2,000 pounds.
      c. The owner or operator shall calculate THAP emissions in tons per month from the P3 PCS Spray Dryer (EU 22B) by summing the metal HAP and SHAP as specified in Condition A.(2)a., and A.(2)b..
B. Per 40 CFR §63.11621(a), in all areas where material containing chromium or manganese are handled, the owner or operator shall comply with management practices by:
   (1) Performing housekeeping measures to minimize excess dust. These measures must include, but not be limited to, the practices specified below.
      a. You must use either an industrial vacuum system or manual sweeping to reduce the amount of dust;
      b. At least once per month, you must remove dust from walls, ledges, and equipment using low pressure air or by other means, and then sweep or vacuum the area;
      c. You must keep exterior doors in the immediate affected areas shut except during normal ingress and egress, as practicable. This paragraph 40 CFR §63.11621 (a)(1)(iii) does not apply to areas where finished product is stored in closed containers, and no other materials containing chromium or manganese are present.
   (2) Maintaining and operating all process equipment in accordance with manufacturer's

specifications and in a manner to minimize dust creation; and,

(3) The owner or operator shall keep records of the dust minimizing procedures used at the facility.

C. Per 40 CFR §63.11621(b), the owner or operator shall store any raw material containing chromium or manganese in closed containers.

D. The owner or operator shall comply with the requirements of notification, reporting and recordkeeping, as specified in 40 CFR §63.11624.

E. The owner or operator shall operate and maintain the Thermal Oxidizer (CE22C), PCS Cyclone (CE22A), and PCS Venturi Scrubber (CE22B) according to the manufacturer's specifications and maintenance schedule. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:

(1) The date and time any inspection and/or maintenance was performed on the control equipment;

(2) Any issues identified during the inspection and the date each issue was resolved; and,

(3) Any issues identified during the maintenance activities and the date each issue was resolved.

F. The owner or operator shall maintain the operating temperature of the Thermal Oxidizer (CE22C) at no less than 50 degrees Fahrenheit below the average operating temperature recorded for the Thermal Oxidizer during the most recent performance test that demonstrated compliance with the emission limits as specified in the emission limits section above.

(1) The owner or operator shall record the operating temperature (degrees Fahrenheit) of the Thermal Oxidizer (CE22C) at least once per calendar day. This requirement shall not apply on days when the emission units are not in operation.

G. The owner or operator shall maintain onsite a copy of the most recent performance test(s) that demonstrated compliance with the emission limits listed above along with the recorded Thermal Oxidizer (CE22C) operating temperature.

H. The Venturi Scrubber (CE22B) shall have a scrubber liquid (water) level between 240 and 725 gallons.

(1) The owner or operator shall monitor the scrubber liquid (water) level of the scrubber on a continuous basis.

(2) The owner or operator shall record the scrubber liquid (water) level of the scrubber at least once per calendar day. This requirement shall not apply on days when the emission units are not in operation.

(3) If the level deviates outside the minimum and maximum level required, then record the time, date, and actions taken to correct the situation and when the level is back between the minimum and maximum level required.

Authority for Requirement: DNR Construction Permit 16-A-318-S2

See Plant-Wide Conditions for additional requirements.

NESHAP Applicability

This equipment is subject to the requirements of 40 CFR 63 Subparts VVVVVV – National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources, and DDDDDDD – National Emission Standards for Hazardous Air Pollutants for Area Sources: Prepared Feeds Manufacturing.

Authority for Requirement: 40 CFR 63 Subpart VVVVVV
567 IAC 23.1(4)"ev"
40 CFR 63 Subpart DDDDDDD
567 IAC 23.1(4)"fd"

**Emission Point Characteristics**

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

Stack Height, (ft., from the ground): 50
Stack Opening, (inches, dia.): 29
Exhaust Flow Rate (scfm): 11,000
Exhaust Temperature (°F): 650
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 16-A-318-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 24.108(3)

## Emission Point ID Number: EP 28(AB)

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|---|---|---|---|---|---|
| EU 28 | Fluid Bed Dryer | CE28: Baghouse | Livestock Feed Additive | 7,733 lbs wet feed/hr, 3.0 MMBtu/hr of natural gas | 18-A-152-S2 |

## 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 18-A-152-S2
567 IAC 23.3(2)"d"

[(1)] An exceedance of the indicator opacity of "*No Visible Emissions (NVE)*" 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 ($PM_{10}$)
Emission Limit(s): 1.11 lb/hr
Authority for Requirement: DNR Construction Permit 18-A-152-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.11 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 18-A-152-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide ($SO_2$)
Emission Limit(s): 500 $ppm_v$
Authority for Requirement: DNR Construction Permit 18-A-152-S2
567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.50 lb/hr
Authority for Requirement: DNR Construction Permit 18-A-152-S2

Pollutant: Single HAP
Emission Limit(s): 0.01 lb/hr[(2)]
Authority for Requirement: DNR Construction Permit 18-A-152-S2
[(2)] Limit excludes metal HAP (including manganese, chromium, selenium, and cobalt).

See Plant-Wide Conditions for additional requirements.

**Operational Limits & Reporting/Record keeping Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall calculate HAP emissions from the Fluid Bed Dryer (EU 28) using the following methodology:
   (1) Record the identification and the HAP content of each material added to the Fluid Bed Dryer (EU 28).
   (2) Record the number of hours the Fluid Bed Dryer (EU 28) is operated on a daily basis.
      a. The owner or operator shall calculate metal HAP emissions from the Fluid Bed Dryer (EU 28) in tons per month by multiplying the allowable hourly PM emission rate in the emission limits above by the HAP content of the material processed and the total number of hours the emission source operated during the month divided by 2,000 pounds.
      b. The owner or operator shall calculate SHAP emissions from the Fluid Bed Dryer (EU 28) in tons per month by multiplying the allowable hourly SHAP emission rate in the emission limits above by the number of hours the emission source operated during the month divided by 2,000 pounds.
      c. The owner or operator shall calculate THAP emissions in tons per month from the Fluid Bed Dryer (EU 28) by summing the metal HAP and SHAP as specified in Condition A.(2).a. and A.(2).b.

B. Per 40 CFR §63.11621(a), in all areas where material containing chromium or manganese are handled, the owner or operator shall comply with management practices by:
   (1) Performing housekeeping measures to minimize excess dust. These measures must include, but not be limited to, the practices specified below.
      a. You must use either an industrial vacuum system or manual sweeping to reduce the amount of dust;
      b. At least once per month, you must remove dust from walls, ledges, and equipment using low pressure air or by other means, and then sweep or vacuum the area;
      c. You must keep exterior doors in the immediate affected areas shut except during normal ingress and egress, as practicable. This paragraph 40 CFR §63.11621 (a)(1)(iii) does not apply to areas where finished product is stored in closed containers, and no other materials containing chromium or manganese are present.
   (2) Maintaining and operating all process equipment in accordance with manufacturer's specifications and in a manner to minimize dust creation; and,
   (3) The owner or operator shall keep records of the dust minimizing procedures used at the facility.

C. Per 40 CFR §63.11621(b), the owner or operator shall store any raw material containing chromium or manganese in closed containers.

D. The owner or operator shall comply with the requirements of notification, reporting and recordkeeping, as specified in 40 CFR §63.11624 when using materials containing chromium or manganese.

E. The owner or operator shall operate and maintain the Baghouse (CE28) according to the

manufacturer's specifications and maintenance schedule. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:

(1) The date and time any inspection and/or maintenance was performed on the control equipment;
(2) Any issues identified during the inspection and the date each issue was resolved; and,
(3) Any issues identified during the maintenance activities and the date each issue was resolved.

F. The Baghouse (CE28) differential pressure drop shall be maintained between 1 to 6 inches water column.

(1) The owner or operator shall properly operate and maintain equipment to continuously monitor the differential pressure drop across the baghouse. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
(2) The owner or operator shall collect and record the pressure drop across the baghouse, in inches of water, once per calendar day. If the pressure drop across the baghouse falls outside the range specified in Condition I, the owner or operator shall investigate the baghouse and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the baghouse is not in operation.

Authority for Requirement: DNR Construction Permit 18-A-152-S2

See Plant-Wide Conditions for additional requirements.

NESHAP Applicability

This equipment is subject to the requirements of 40 CFR 63 Subparts VVVVVV – National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources, and DDDDDDD – National Emission Standards for Hazardous Air Pollutants for Area Sources: Prepared Feeds Manufacturing.

Authority for Requirement: 40 CFR 63 Subpart VVVVVV
567 IAC 23.1(4)"ev"
40 CFR 63 Subpart DDDDDDD
567 IAC 23.1(4)"fd"

**Emission Point Characteristics**

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

Stack Height, (ft., from the ground): 40.6
Stack Opening, (inches, dia.): 30
Exhaust Flow Rate (scfm): 13,000
Exhaust Temperature (°F): 140
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 18-A-152-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 24.108(3)

## Emission Point ID Number: EP 30(AD)

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|---|---|---|---|---|---|
| EU 30A | Reactor No. 5 | CE 30A: Venturi Scrubber<br>CE 30B: Packed Bed Scrubber | Inorganic Acids, Amino Acids | 19,000 lb wet or dry material/batch (each) | 19-A-246-S3 |

## 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 19-A-246-S3
567 IAC 23.3(2)"d"

[(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 ($PM_{10}$)
Emission Limit(s): 0.04 lb/hr
Authority for Requirement: DNR Construction Permit 19-A-246-S3

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.04 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 19-A-246-S3
567 IAC 23.3(2)"a"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.39 lb/hr
Authority for Requirement: DNR Construction Permit 19-A-246-S3

Pollutant: Hydrochloric Acid (HCl)
Emission Limit(s): 0.80 lb/hr
Authority for Requirement: DNR Construction Permit 19-A-246-S3

Pollutant: Single HAP
Emission Limit(s): 0.055 lb/hr[(2)]
Authority for Requirement: DNR Construction Permit 19-A-246-S3
[(2)] Limit excludes Hydrochloric Acid (HCl) and metal HAP (including manganese, chromium, selenium, and cobalt).

See Plant-Wide Conditions for additional requirements.

**Operational Limits & Reporting/Record keeping Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall calculate HAP emissions from Reactor No. 5 (EU 30A) using the following methodology:
   (1) Record the identification and the HAP content of each material added to Reactor No. 5 (EU 30A).
   (2) Record the number of hours that Reactor No. 5 (EU 30A) is operated on a daily basis.
      a. The owner or operator shall calculate metal HAP emissions from Reactor No. 5 (EU 30A) in tons per month by multiplying the allowable hourly PM emission rate listed in the emission limits above by the HAP content of the material processed and the total number of hours the emission source operated during the month divided by 2,000 pounds.
      b. The owner or operator shall calculate HCl emissions from Reactor No. 5 (EU 30A) in tons per month by multiplying the allowable hourly HCl emission rate listed in the emission limits above by the number of hours the emission source operated during the month divided by 2,000 pounds.
      c. The owner or operator shall calculate SHAP emissions for each HAP emitted from Reactor No. 5 (EU 30A) in tons per month by multiplying the allowable hourly SHAP emission rate listed in the emission limits above by the number of hours the emission source operated during the month divided by 2,000 pounds.
      d. The owner or operator shall calculate THAP emissions in tons per month from Reactor No. 5 (EU 30A) by summing the metal HAP, HCl, and SHAP as specified in Condition A.(2)a., A.(2)b., and A.(2)c.

B. The owner or operator shall operate and maintain the Venturi Scrubber (CE 30A) and Packed Bed Scrubber (CE 30B) according to the manufacturer's specifications and maintenance schedule. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
   (1) The date and time any inspection and/or maintenance was performed on the control equipment;
   (2) Any issues identified during the inspection and the date each issue was resolved; and,
   (3) Any issues identified during the maintenance activities and the date each issue was resolved.

C. The owner or operator shall maintain a scrubber liquor (water) level for the Venturi Scrubber (CE 30A) and Packed Bed Scrubber (CE 30B) that is between 125 and 380 gallons based on the equipment design. The owner or operator shall establish an alarm setting for the purpose of initiating corrective action based on a scrubber liquor (water) level of less than 125 gallons or greater than 380 gallons.
   (1) The owner or operator shall monitor whether the scrubber liquor (water) level of the scrubbers is within the required range on a continuous basis.
   (2) The owner or operator shall record whether the scrubber liquor (water) level of the scrubbers is within the required range at least once per calendar day. This requirement shall not apply on days when the emission units are not in operation.

(3) If the level deviates outside the minimum and maximum level required, then record the time, date, and actions taken to correct the situation to be between the minimum and maximum level required.

D. The pH of the liquor in the scrubbers shall be maintained above 6.5 at all times.
   (1) The owner or operator shall monitor the pH of the scrubber liquor on a continuous basis.
   (2) The owner or operator shall record the pH of the scrubber liquor for the scrubbers two times per calendar day at a minimum. This requirement shall not apply on days when the emission unit is not in operation.
   (3) If the pH deviates below the pH required, then record the time, date, and actions taken to correct the situation and when the pH is back above the minimum pH required.

**NESHAP Subpart VVVVVV Requirements**

E. Per 40 CFR §63.11494(d), for CMPU using only Table 1 metal HAP, the owner or operator shall comply with the requirements of §63.11495 and, if applicable, §63.11496(f).
   (1) Per 40 CFR §63.11495(a)(1), each process vessel must be equipped with a cover or lid that must be closed at all times when it is in metal HAP service, except for manual operations that require access, such as material addition and removal, inspection, sampling and cleaning. This requirement does not apply to process vessels containing only metal HAP that are in a liquid solution or other form that will not result in particulate emissions of metal HAP (e.g., metal HAP that is in ingot, paste, slurry, or moist pellet form or other form).
   (2) Per 40 CFR §63.11495(a)(3), the owner or operator shall conduct inspections of process vessels and equipment for each CMPU in metal HAP service, as specified in paragraphs (a)(3)(i) through (v) of this section, to demonstrate compliance with paragraph (a)(1) of this section and to determine that the process vessels and equipment are sound and free of leaks.
      a. Inspections must be conducted at least quarterly.
      b. For these inspections, detection methods incorporating sight, sound, or smell are acceptable. Indications of a leak identified using such methods constitute a leak unless you demonstrate that the indications of a leak are due to a condition other than loss of HAP. If indications of a leak are determined not to be HAP in one quarterly monitoring period, you must still perform the inspection and demonstration in the next quarterly monitoring period.
      c. Inspections must be conducted while the subject CMPU is operating.
      d. No inspection is required in a calendar quarter during which the subject CMPU does not operate for the entire calendar quarter and is not in metal HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required.
   (3) Per 40 CFR §63.11495(a)(4), the owner or operator must repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair. For the purposes of this paragraph (a)(4), a leak will be considered "repaired" if a condition specified in paragraph (a)(4)(i), (ii), or (iii) of this section is met.
      a. The visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated, or
      b. No bubbles are observed at potential leak sites during a leak check using soap

solution, or

c. The system will hold a test pressure.

(4) Per 40 CFR §63.11495(a)(5), the owner or operator must keep records of the dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair.

(5) Per 40 CFR §63.11495(d), at all times, the owner or operator must operate and maintain any affected CMPU, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the CMPU.

F. The owner or operator shall comply with the requirements of notification, reporting, and recordkeeping, as specified in 40 CFR §63.11501 when using materials containing chromium or manganese.

**NESHAP Subpart DDDDDDD Requirements**

G. Per 40 CFR §63.11621(a), in all areas where material containing chromium or manganese are handled, the owner or operator shall comply with management practices by:

(1) Performing housekeeping measures to minimize excess dust. These measures must include, but not be limited to, the practices specified below.

a. You must use either an industrial vacuum system or manual sweeping to reduce the amount of dust;

b. At least once per month, you must remove dust from walls, ledges, and equipment using low pressure air or by other means, and then sweep or vacuum the area;

c. You must keep exterior doors in the immediate affected areas shut except during normal ingress and egress, as practicable. This paragraph [40 CFR §63.11621(a)(1)(iii)] does not apply to areas where finished product is stored in closed containers, and no other materials containing chromium or manganese are present.

N. Maintaining and operating all process equipment in accordance with manufacturer's specifications and in a manner to minimize dust creation; and,

O. The owner or operator shall keep records of the dust minimizing procedures used at the facility.

H. Per 40 CFR §63.11621(b), the owner or operator shall store any raw material containing chromium or manganese in closed containers.

I. Per 40 CFR §63.11621(c), the mixer where materials containing chromium or manganese are added must be covered at all times when mixing is occurring, except when the materials are being added to the mixer. Materials containing chromium or manganese must be added to the mixer in a manner that minimizes emissions.

J. The owner or operator shall comply with the requirements of notification, reporting and recordkeeping, as specified in 40 CFR §63.11624 when using materials containing chromium or manganese.

Authority for Requirement: DNR Construction Permit 19-A-246-S3
40 CFR 63 Subpart VVVVVV
567 IAC 23.1(4)"ev"
40 CFR 63 Subpart DDDDDDD
567 IAC 23.1(4)"fd"

See Plant-Wide Conditions for additional requirements.

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

Stack Height, (ft., from the ground): 35.5
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 90
Exhaust Temperature (°F): 75
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 19-A-246-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 24.108(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 (IAC). When 567 IAC as amended May 15, 2024, and cited in this permit becomes State Implementation Plan (SIP) approved, it will supersede 567 IAC as amended February 8, 2023. Prior to May 15, 2024, all Title V rule citations in this Title V permit were found and cited in 567 IAC Chapter 22. During the period from May 15, 2024, to the date that 567 IAC as amended May 15, 2024, is approved into the SIP, both 567 IAC as amended May 15, 2024, and 567 IAC as amended February 8, 2023 form the legal basis for the applicable requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix C.

**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 24.108(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 24.105(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 24.108(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 24.108(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 24.108(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 24.108(15)"c"*

**G2. Permit Expiration**

1. Except as provided in rule 567—24.104(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—24.105(455B). *567 IAC 24.116(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. 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 24.105(2). *567 IAC 24.105*

**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 24.107(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 24.108(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 24.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 24.108 (5)*

**G6. Annual Fee**

1. The permittee is required under subrule 567 IAC 24.106 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 24.115(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 24.108 (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 24.108 (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 21.8(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 24.108(4), 567 IAC 24.108(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 24;

b. Compliance test methods specified in 567 Chapter 21; 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)*

**G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification**

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 24.108(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 21.10(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 21.10(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 21.7(1)-567 IAC 21.7(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 24.108(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 24.108(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 24.

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—24.140(455B) through 567 - 24.144(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 24.110(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 24.110(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 24.110(1). *567 IAC 24.110(3)*

4. The permit shield provided in subrule 24.108(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 24.110(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 24.108(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 - 24.113(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 24.107(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 24.107(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 24.112(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 24, 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 24.111-567 IAC 24.113*

**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 <u>except</u> 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 24.108(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 24.108(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 24.108(17)"a", 567 IAC 24.108(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 24.114(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 24.114(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 24.114(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 Section 114 of the Act. *567 IAC 24.108 (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 24.108 (8)*

**G27. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 24.108 (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 24.111(1). *567 IAC 24.111 (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 24.3(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 (42 days) 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
6200 PARK AVE
SUITE 200
DES MOINES, IA 50321
(515) 343-6589

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 21.10(7)"a", 567 IAC 21.10(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
6200 PARK AVE
SUITE 200
DES MOINES, IA 50321
(515) 313-8325

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**
6200 Park Ave
Suite 200
Des Moines, IA 50321
(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 Street SE
Cedar Rapids, IA 52401
(319) 892-6000

# V. Appendix A: Links to Standards

40 CFR 60 Subpart A – General Provisions
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-A

40 CFR 60 Subpart DDDDDDD—National Emission Standards for Hazardous Air Pollutants for Area Sources: Prepared Feeds Manufacturing
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-DDDDDDD

40 CFR 63 Subpart VVVVVV—National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-VVVVVV

# Appendix B
# Administrative Consent Order 2025-AQ-18 and O&M Plan

R. SERMES/ Initials Con10-1 / MF
FACILITY ID 41-02-010
WKA 2.7/ Doc Code CO / AO
Date Rec. 12/9/25

**IOWA DEPARTMENT OF NATURAL RESOURCES**

**ADMINISTRATIVE CONSENT ORDER**

| IN THE MATTER OF:<br><br>ZINPRO CORPORATION | ADMINISTRATIVE CONSENT ORDER<br><br>NO. 2025-AQ-18 |
|---|---|

To:

Zinpro Corporation
Jill Pliner, Registered Agent
21810 Logistics Park Drive
Shell Rock, Iowa 50670

Zinpro Corporation
Nick Treblik
Global Director of Operations
880 East Lyon Street
Garner, Iowa 50438

Zinpro Corporation
Nick Treblik
Global Director of Operations
7500 Flying Cloud Drive, Suite 800
Eden Prairie, Minnesota 55344

Zinpro Corporation
Stephanie S. Lamphere
Associate General Counsel
7500 Flying Cloud Drive, Suite 800
Eden Prairie, Minnesota 55344

## I. SUMMARY

This administrative consent order is entered into between the Iowa Department of Natural Resources (DNR) and Zinpro Corporation (Zinpro) for the purpose of resolving air quality violations. In the interest of avoiding litigation, the parties have agreed to the provisions below.

Any questions regarding this administrative consent order should be directed to:

**Relating to technical requirements:**
Mark Fields
Iowa Department of Natural Resources
6200 Park Avenue
Suite 200
Des Moines, Iowa 50321
Phone: 515-343-6589

**Relating to legal requirements:**
Anne Preziosi, Attorney for the DNR
Iowa Department of Natural Resources
6200 Park Avenue
Suite 200
Des Moines, Iowa 50321
Phone: 515-238-3429

**Payment of penalty to:**
Director of the Iowa DNR
6200 Park Avenue
Suite 200
Des Moines, Iowa 50321

## II. JURISDICTION

This administrative consent order is issued pursuant to the provisions of Iowa Code sections 455B.134(9) and 455B.138(1), which authorize the director to issue any order necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division II (air quality), and the rules promulgated or permits issued pursuant to that part; and Iowa Code section 455B.109 and 567 Iowa Administrative Code (IAC) chapter 10, which authorize the director to assess administrative penalties.

## III. STATEMENT OF FACTS

Zinpro neither admits nor denies the Statement of Facts.

1. Zinpro Corporation (Zinpro) has a facility in Garner, Iowa, that was built in 1993 to manufacture livestock feed additives and pre-mixtures containing mineral-amino acid complexes. Zinpro has provided information to the DNR that the Zinpro facility in Garner produces trace mineral products to improve animal wellness and performance. As such, Zinpro's primary activity is providing feed ingredients for animals. Zinpro's products are formed by complexing a soluble metal salt with an amino acid.

**Summary**

2. Construction Permit No. 07-A-1269-S3 (Ring Dryer, EP 13) was issued to Zinpro on December 8, 2020. Condition 1, *Emission Limits*, establishes emission limits of 0.1 gr/dscf for PM, 13.62 lb/hr for PM and PM10, 4.5 lb/hr for Volatile Organic Compounds (VOCs), and 0.33 lb/hr for Single Hazardous Air Pollutants (SHAP).

- According to the ring dryer stack test conducted on December 12, 2023, the emission results demonstrated the following violations when producing the Availa Cu product at a production rate of 9,223.3 lb/hr:

- PM results were found to be 44.60 lb/hr and 0.134 gr/dscf.
- PM10 results were found to be 44.60 lb/hr.

- According to the ring dryer stack test conducted on December 13, 2023, the emission results demonstrated the following violations when producing the Availa 4 product at a production rate of 16,543 lb/hr:
  - VOC results were found to be 23.71 lb/hr.

  The following exceeded the single HAP emission limit:
  - Acetaldehyde results were found to be 1.83 lb/hr.
  - Methanol results were found to be 0.82 lb/hr.
  - Formaldehyde results were found to be 1.49 lb/hr.
  - Toluene results were found to be 0.45 lb/hr.
  - Propionaldehyde results were found to be 0.75 lb/hr.
  - Benzene results were found to be 4.74 lb/hr.
- According to the ring dryer stack test conducted on August 13, 2024, the emission results demonstrated the following violations when producing the Availa Cu product at a production rate of 6,531.7 lb/hr:
  - PM results were found to be 33.61 lb/hr and 0.105 gr/dscf.
  - PM10 results were found to be 33.63 lb/hr.
- According to the ring dryer stack test conducted on August 15, 2024, the emission results demonstrated the following violations when producing the Availa 4 product at a production rate of 14,430.3 lb/hr:
  - PM results were found to be 16.14 lb/hr.
  - PM10 results were found to be 16.14 lb/hr.

- According to the ring dryer thermal oxidizer stack test conducted on October 23, 2024, the emission results demonstrated the following violations when producing the Availa 4 product at a production rate of 13,335 lb/hr:
  - PM results were found to be 15.95 lb/hr.
  - PM10 results were found to be 15.95 lb/hr.
  - Formaldehyde results were found to be 0.86 lb/hr
- According to the ring dryer thermal oxidizer stack test conducted on February 5, 2025, the emission results demonstrated the following violations when producing the Availa 4 product at a production rate of 12,285 lb/hr:
  - PM results were found to be 15.54 lb/hr.
  - PM10 results were found to be 15.54 lb/hr.

567 IAC 21.10(7) requires that results of stack tests shall be submitted in writing to the director in the form of a comprehensive report within six weeks (42 days) of the completion of the testing. On April 7, 2025, Zinpro submitted to DNR the February 5, 2025, stack test report. The test report was received 61 days after stack testing occurred.

3. 567 IAC 22.106 requires that facilities subject to the Title V program submit *"Emissions inventory and documentation due dates"* and requires that "[t]he emissions inventory shall be submitted through the electronic format specified by the department. An owner or operator shall, by March 31, submit documentation of actual emissions for the previous calendar year." DNR issued a Letter of Noncompliance dated May 9, 2024, for failure to submit the 2023 Title V Emission Inventory by March 31, 2024. Zinpro submitted the facility's 2023 Title V Emission Inventory on May 17, 2024.

**Chronology**

4. On April 10, 2023, DNR received a complaint regarding rust-colored staining on the properties in the area of the Zinpro facility. On April 14, 2023, DNR investigated the April 10, 2023, complaint and documented with pictures of various areas showing rust discoloration. DNR staff met with Zinpro staff onsite to discuss the observed deposits on buildings and structures adjacent to the facility. During the visit, Zinpro staff indicated preventative maintenance is routinely completed on all air quality control equipment and denied the thermal oxidizer stack was the cause of discoloration on neighboring buildings. DNR staff were unable to determine if Zinpro was having excess emission issues and did not document any fugitive dust violations during the site visit. Despite documentation in the record dated April 19, 2023, that no fugitive dust violations were found during the April 14, 2023, site visit, on April 20, 2023, DNR issued a Letter of Information (LOI) to Zinpro, requiring the facility to develop and submit "a compliance plan detailing how inspections and maintenance will be conducted to prevent emissions issues".

5. On May 10, 2023, Zinpro provided a response to the April 20, 2023, LOI. The response letter included the following statement: "Zinpro's stance is that we are compliant with all permits and regulations at our Garner location." The facility stated that EP 13 and EP 8 (Reactor #2 Scrubber, Permit No. 97-A-521-S2) are compliant with all requirements in section 5 of the relevant construction permits and provided information on the existing routine inspections and cleaning procedures of EP 13 and EP 8. Zinpro did not submit a compliance plan detailing how inspections and maintenance will be conducted to prevent emissions issues, as required by the DNR April 20, 2023, LOI.

6. On September 7, 2023, DNR staff observed visible emissions (greater than indicator opacity of 10%) from the facility while driving west along Highway 18 at approximately 4:55pm. The DNR contacted Zinpro to inquire about the cause of the visible emissions the following day. Zinpro indicated no maintenance was done to the equipment recently and that they would investigate the issue. Later that day Zinpro shut down production to look for issues with the equipment and found none. On September 25, 2023, at 5:00pm DNR staff documented through video another instance of visible emissions from EP 13 for approximately 15 minutes. On September 27, 2023, DNR conducted a follow up investigation regarding the September 7 and 25, 2023, visible emissions. DNR took photographs of structures that have a rust discoloration adjacent to the Zinpro facility. The photographs included a picture of a chain link fence and corner post demonstrating rust-colored deposits only on the side facing the Zinpro facility. While onsite DNR staff showed the video of emissions to Zinpro staff and reviewed operational records. The records indicated the thermal oxidizer was consistently being operated above the minimum temperature requirements (above 1260 degrees Fahrenheit). Lastly, the DNR informed Zinpro staff that follow up action (likely stack testing) would be required by DNR.

7. On October 12, 2023, DNR issued a Notice of Violation letter (NOV) regarding the September 25, 2023, visible emissions from the Ring Dryer EP 13 above 10% opacity. Since emissions were above 10% opacity/the indicator opacity, the facility was required to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The DNR required emission stack testing of the Ring Dryer EP 13 for PM, PM10, and Opacity while producing the product that was observed causing emissions on September 25, 2023, at maximum capacity. Additionally, Zinpro was required per 567 IAC 24.2(2)(moved to 567 IAC 21.8 as of June 19, 2024) to "develop an operation and maintenance plan detailing how operational changes and/or maintenance activities will be performed to prevent further emission issues".

8. On October 18, 2023, Zinpro submitted a Maintenance Plan and schedule for stack testing EP 13 as required by the October 12, 2023, NOV. Additionally, Zinpro provided a compliance plan. The compliance plan included Zinpro's proposal to stack test EP 13 under two separate operating scenarios:

- The Availa Cu product at a rate of 9000 lb/hr; and
- The Availa 4 product at a rate of 14,000 lb/hr to 16,000 lb/hr.

9. On November 20, 2023, Zinpro requested a variance to operate and stack test EP 13 while producing the Availa 4 product at 16,000 lb/hr of dry product, which is higher than the current permitted maximum capacity of 14,000

lb/hr. DNR approved Zinpro's request to operate EP 13 at 16,000 lb/hr from November 27, 2023, to December 15, 2023. DNR requested PM, PM10, VOC, and HAP be tested at the increased production rates.

10. On December 12, 2023, Zinpro conducted PM10 and PM stack testing on EP 13 while producing the Availa Cu product at a production rate of 9,223 lb/hr. Availa Cu was the product being produced on September 25, 2023, when opacity was documented by the DNR. Opacity testing was not conducted as required.

11. On December 13, 2023, Zinpro conducted PM, PM10, VOC, and HAP stack testing on EP 13 while producing the Availa 4 product at the 16,543 lb/hr rate requested in the approved variance. DNR observers were onsite for the stack testing and observed opacity below the permitted emission limit and indicator opacity at less than 5% and also observed that the impinger water was bright yellow after run #2.

12. On January 8, 2024, Zinpro conducted Opacity stack testing while operating EP 13 at similar operating conditions as the December 12, 2023, stack test. Availa Cu was produced at 9,359 lb/hr during the stack testing.

13. On January 19, 2024, Zinpro submitted a compliance plan to address the PM and PM10 exceedances for EP 13 while producing Availa Cu as stack tested on December 12, 2023. The plan requested to run eight batches of the Availa Cu product from February 2024 through July 2024 to attempt to identify and address the cause of the violations.

14. On January 25, 2024, Zinpro submitted the test results from the December 12 and 13, 2023; and January 8, 2024, stack tests on EP 13.

15. On February 15, 2024, DNR issued an NOV to Zinpro for violations of the PM and PM 10 emission limits while producing Availa Cu and violations of the VOC and single HAP emission limits while producing Availa 4. Zinpro submitted a compliance plan in response to the NOV on January 19, 2024, which DNR accepted, to address Availa Cu PM and PM10 violations. The DNR required a stack test or alternative emission control plan by August 31, 2024. DNR also required that by March 16, 2024, Zinpro would submit a compliance plan for the VOC and Single HAP violations while producing Availa 4.

16. On March 14, 2024, Zinpro submitted a compliance plan for the VOC and SHAP exceedances while producing Availa 4 as demonstrated during the December 13, 2023, stack test, identifying that engineering testing would be conducted on March 14 and 15, 2024. In addition, Zinpro identified that the

regenerative thermal oxidizer (RTO) required repairs which were anticipated to be completed by July 5, 2024.

17. On March 21 and 28, 2024, DNR requested results from the March 14 and 15, 2024, VOC/HAP engineering testing, which Zinpro had employed as part of its efforts to investigate root cause and maintain compliance, and DNR requested to meet with Zinpro. On March 26 and 29, 2024, Zinpro provided DNR the engineering data showing that VOC and HAP results were lower than the December 2023 stack test results but continued to exceed the permitted limits. A meeting was scheduled for April 10, 2024, to discuss continuing compliance issues with EP 13.

18. On April 10, 2024, DNR and Zinpro met to discuss the emission limit violations at EP 13. Zinpro provided Single HAP and Total HAP 12-month rolling data demonstrating the facility is below the major source thresholds. Zinpro provided updates on needed repairs to the RTO and timing of the repairs.

19. On April 12, 2024, DNR sent a certified letter accepting the January 19, 2024, and March 15, 2024, Availa 4 and Availa Cu compliance plans provided by Zinpro. DNR requested that a permit determination be submitted by June 15, 2024, for the repairs and changes in operation described to the EP 13 equipment and control equipment. DNR also requested compliance plan updates by June 15, 2024, and July 31, 2024. Operations and Maintenance Plans were required once the compliance plans were complete.

20. On May 9, 2024, DNR issued a Letter of Noncompliance (LNC) to Zinpro for failure to submit the 2023 Title V emission inventory for the facility by March 31, 2024, as required. On May 17, 2024, Zinpro submitted the 2023 Title V emissions inventory.

21. On May 25, 2024, Zinpro reported that repairs to the RTO had been completed within the proposed timeframe.

22. On June 7, 2024 Zinpro replaced the stage 3 heat exchanger equipment.

23. On June 13, 2024, Zinpro submitted a permit determination as required by DNR via Easyair.

24. On June 15, 2024, Zinpro submitted a compliance plan update, as required by DNR. The update provided that the RTO repairs were completed on May 25, 2024, and that Zinpro was continuing to modify the internal characteristics of the cyclone control equipment to reduce particulate loading to the RTO.

25. On June 28, 2024, Zinpro scheduled EP13 stack testing with the DNR to occur on August 13 to 15, 2024.

26. On July 17, 2024, DNR provided Zinpro with a construction permit determination letter in response to Zinpro's request to determine if repairs made to the RTO and/or changes to Availa Cu product formulation would require a construction permit modification. The DNR's letter stated that a permit modification was not needed for the RTO repairs, but a permit modification was needed to add periodic compliance determinations (stack testing) to verify compliance with the emission limits over time and to address potential impact on PM emissions for formula changes on the Ring Dryer. The DNR stated this was necessary due to potential future issues related to the control of PM entering the RTO and to ensure the facility would operate and maintain the RTO correctly.

27. On August 13, 2024, Zinpro conducted stack testing on the Availa Cu product. DNR was onsite to observe the stack testing. Particulate deposits on filters appeared much lighter than during previous stack tests and the impinger water was clear. Zinpro contacted DNR on August 14, 2024, to report that burner issues with the RTO would require repair, which will delay the Availa 4 stack test. Zinpro was able to complete Availa 4 stack testing on August 15, 2024.

28. On September 20, 2024, Zinpro scheduled VOC, HAP, PM, and PM10 stack testing on EP 13 to be conducted on October 22 and 23, 2024 while producing Availa 4 product.

29. On September 30, 2024, Zinpro submitted the August 13 and 15, 2024, stack test reports to DNR.

30. On October 3, 2024, Zinpro submitted a compliance plan for the emission limit violations demonstrated during the August 13 and 15, 2024, stack tests. The facility stated that the RTO burner issues caused a failure of the PM and PM10 while producing the Availa 4 product and planned to retest during VOC/HAP test on October 23, 2024. Zinpro stated the facility would halt the production of Availa 4 until the October 23 stack test. Additionally, Zinpro stated the Availa Cu product would not be produced until additional control equipment could be installed.

31. On October 23, 2024, Zinpro conducted stack testing on the Availa 4 product.

32. On November 18, 2024, DNR issued a NOV for the violations of the EP 13 PM and PM10 emission limits during the August 13 and 15, 2024, stack test while producing Availa 4 and Availa Cu. The NOV stated that DNR would

evaluate the Availa 4 retest results from the October 23, 2024, stack test to determine if PM and PM10 emission limit violations had been addressed. DNR requested that Zinpro submit construction permit applications by December 18, 2024, to add restrictions on producing the Availa Cu product. Additionally, Zinpro was asked to provide information to DNR regarding whether the Availa Cu product would be produced by any other Zinpro facility in the State of Iowa. Zinpro informed DNR that the Availa Cu product is not being produced at any other Zinpro source in the State of Iowa, although Zinpro has a second facility located in Shell Rock, Iowa.

33. On December 2, 2024, Zinpro began discussions with DNR about submission of a construction permit application. DNR received a compliance plan from Zinpro dated December 2, 2024, stating the facility's intent to install additional control equipment on EP 13 for PM and PM10 by the end of 3rd quarter 2025. Zinpro stated that until that time, Availa 4 production would be restricted to 11,000 lb/hr. Zinpro committed to submitting a permit modification to prohibit Availa Cu production altogether in EP 13 and to increase the PM and PM10 emission rate to 15.5 lb/hr for Availa 4.

34. On December 4, 2024, Zinpro submitted the stack test report for the October 23, 2024, EP 13 stack test that occurred while producing Availa 4. The stack test demonstrated violations of the emission limits for PM, PM10 and Formaldehyde.

35. On December 18, 2024, Zinpro submitted a permit application for EP 13 to DNR. The permit application proposed to raise PM and PM10 emission limits; and to prohibit production of Availa Cu. This application is assigned Construction Permit project No. 24-403. DNR requested an air dispersion modeling analysis for the requested increase in PM2.5 emissions based on previously permitted increases in emissions which had not been evaluated in Construction Permit Projects No. 18-051 and No. 18-378. The PM emission limits were increased as part of these projects based on previous emission limit exceedances from previous stack testing.

36. On December 23, 2024, Zinpro submitted a test notification that stack testing would be conducted on EP 13 on January 27, 2025.

37. On December 30, 2024, DNR issued an NOV to Zinpro for exceeding the PM, PM10, and Formaldehyde (Single HAP) permitted emission limits during the October 23, 2024, stack testing which occurred while producing Availa 4. A compliance plan for the Formaldehyde exceedance was required to be submitted by January 31, 2025.

38. On January 7, 2025, Zinpro submitted a compliance plan to request an increase of the Single HAP emission limit to 1 lb/hr to address the Formaldehyde violations. On January 7, 2025, Zinpro also submitted a revision of the permit application to increase the Formaldehyde emission limits to 1 lb/hr.

39. On January 9, 2025, a DNR Construction Permit engineer emailed Zinpro staff, requesting additional information related to products manufactured during previous stack tests, the corresponding RTO temperatures, and a list of all products produced in this unit. This information had not previously been provided in the December 18, 2024, permit application or stack test reports submitted to DNR.

40. On January 27, 2025, DNR again requested the information related to Construction Permit Project Number 24-403, originally requested in the January 9, 2025, email. Zinpro staff provided to DNR that Zinpro's legal team had reviewed the January 9 information request and advised that all relevant information in support of Zinpro's recently submitted air permit modification request (project number 24-403) was contained within the existing permit application (and correlating and supporting documents) and was readily available to DNR. Additionally, Zinpro notified the DNR via email that due to weather conditions, the stack testing scheduled for January 27, 2025, was delayed until February 5, 2025.

41. On February 5, 2025, stack testing for PM and PM10 was conducted on EP 13 while producing the Availa 4 product at approximately 12,500 lb/hr.

42. On February 14, 2025, Zinpro and DNR staff met to discuss the information requested by DNR on January 9, 2025.

43. On February 19, 2025, Zinpro provided the DNR the data requested on January 9, 2025.

44. On February 28, 2025, Zinpro requested modeling files and information from DNR.

45. On March 4, 2025, and March 25, 2025, DNR asked whether Zinpro had received the February 5, 2025, stack test emission results, and Zinpro did not respond. The February 5, 2025, stack test report was due to be submitted to the Iowa DNR on March 19, 2025.

46. On April 3, 2025, Zinpro submitted a compliance plan requesting to conduct further stack testing on EP13, due to engineering tests demonstrating lower emission levels. Zinpro requested that DNR waive the 30-day test

notification requirement for the proposed stack testing on April 15, 2025. DNR denied the waiver request, as Zinpro had failed to submit to DNR the February 5, 2025, stack test results within the 42-day stack test reporting timeframe required in 567 IAC 21.10(7).

47. On April 7, 2025, Zinpro submitted the February 5, 2025, stack test report. A NOV was issued on May 6, 2025, as EP 13 was in violation of the PM and PM10 lb/hr permitted limits during the February 5, 2025, stack test. The test report was received 61 days after stack testing occurred, in violation of the 42-day stack test reporting timeframe required in 567 IAC 21.10(7).

48. On May 13, 2025, Zinpro conducted PM and PM10 stack testing for EP 13.

49. On June 24, 2025, Zinpro replaced with RTO Burner Cone.

50. On June 26, 2025, DNR received a stack test report for the May 13, 2025 stack testing. The results demonstrated that the PM and PM10 result were 5.55 lb/hr, which is in compliance with the currently permitted rate of 13.62 lb/hr. DNR issued a certified letter in response to this test report on July 10, 2025, providing that stack testing is required to be completed at the maximum permitted capacity of the source being tested. The EP 13 May 13, 2025, stack testing was reported to have been completed at an average production rate of 12,567 lb/hr or 89.8% of the currently permitted capacity of 14,000 lb/hr. The stack testing was not conducted at the maximum permitted capacity of EP 13 as required.

51. On July 1, 2025, Zinpro requested to amend the EASY Air application for Construction Permit Project No. 24-403 to withdraw the PM and PM10 increases, which eliminated the need to conduct air dispersion modeling.

52. On September 11, 2025, DNR rescinded the February 15, 2024 NOV and the July 10, 2025 Certified Letter. DNR reissued corrected letters to address the incorrect emission rates for EP 13 while producing Availa 4 in the February 15, 2024, NOV and to address an incorrect capacity identified in the July 10, 2025, Certified Letter.

53. Since 2009, Zinpro's Garner facility has received the following additional NOVs and LNCs as follows:

- On July 6, 2023, DNR issued Zinpro an LNC for failure to apply for a Title V Permit as required by 40 CFR 63.11494 NESHAP Subpart VVVVVV and gave Zinpro until October 10, 2023, to submit a Title V permit application. Zinpro's Title V Permit is currently pending.

- On March 3, 2022, DNR issued Zinpro a NOV for record keeping, stack characteristics, and emission observation practice deviations discovered at the facility during the routine February 21, 2022, air quality compliance inspection.
- On July 7, 2021, DNR issued Zinpro an LNC for submitting a stack test report 21 days late.
- On February 5, 2018, DNR issued Zinpro an NOV for a stack test violation of the PM limit on EP 22(V).
- On October 22, 2018, DNR issued Zinpro an NOV for a stack test violation of the PM10 limit on EP 13 and for failure to test by the permitted date.
- On May 20, 2009, DNR issued Zinpro a NOV for a stack test violation of the PM limit on EP 13.

## IV. CONCLUSIONS OF LAW

Zinpro neither admits nor denies the Conclusions of Law.

1. Iowa Code section 455B.133 provides that the Environmental Protection Commission (Commission) shall establish rules governing the quality of air and emission standards. The Commission has adopted 567 IAC chapters 21 through 33 relating to air quality.

2. Iowa Code section 455B.134(3) provides that the director of DNR shall grant, modify, suspend, terminate, revoke, reissue or deny permits for the construction or operation of new, modified, or existing air contaminant sources and for related control equipment.

3. 567 IAC 22.3(3) states that an air quality construction permit may be issued subject to conditions which shall be specified in writing, and may include, but are not limited to, emission limits, operating conditions, fuel specifications, compliance testing, continuous monitoring, and excess emission reporting. As stated above, Zinpro has failed to comply with the emission limit provisions of Air Quality Construction Permit No. 07-A-1269-S3 (Ring Dryer, EP 13), as demonstrated through stack tests.

4. 567 IAC 22.106 requires that facilities subject to the Title V program submit *"Emissions inventory and documentation due dates"* and requires that "[t]he emissions inventory shall be submitted through the electronic format specified by the department. An owner or operator shall, by March 31, submit documentation of actual emissions for the previous calendar year." As stated above, Zinpro failed to timely submit an emission inventory, which was due on March 31, 2024, and was received on May 17, 2024.

5. 567 IAC 22.1(3) requires the application for a permit to construct shall include the following information: ".....(3) The composition of the effluent stream, both before and after any control equipment with estimates of emission rates, concentration, volume and temperature; (4) The physical and chemical characteristics of the air contaminants; ..... (7) Any additional information deemed necessary by the department to determine compliance with or applicability of 567—22.4(455B), 567—22.5(455B), 567—31.3(455B) and 567—33.3(455B) .....". 567 IAC 22.2(1) requires that if a construction permit application is found to be incomplete, DNR will notify the applicant and may deny the application sixty days following such notification. The application for Project Number 24-403 was incomplete because Zinpro did not provide an ambient air quality model that demonstrated compliance or a list of products produced in the ring dryer, as requested by DNR. Zinpro pursued alternative compliance options.

6. 567 IAC 21.8 requires that the owner or operator of any equipment or control equipment shall maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions. Prior to RTO upgades in May of 2024, Zinpro failed to maintain and operate EP 13 in a manner consistent with good practice for minimizing emissions. 567 IAC 21.8(2) states that a Maintenance Plan will be required for equipment or control equipment where a continued pattern of excess emissions indicative of inadequate operation and maintenance is occurring.

7. 567 IAC 21.10(7) requires that results of the tests shall be submitted in writing to the director in the form of a comprehensive report within six weeks (42 days) of the completion of the testing. Zinpro failed to submit the February 5, 2025, stack test results within the allowed timeframe. The report was due on March 19, 2025, and was submitted on April 7, 2025 (19 days late).

## V. ORDER

THEREFORE, DNR orders and Zinpro agrees to the following:

1. Zinpro shall continue to work with DNR on Permit Project No. 24-403 to obtain a modified construction permit for EP 13 to:
    a. Add annual stack testing requirements for PM, PM10, VOC, and HAP. Annual stack testing shall remain in place until 3 consecutive tests demonstrate compliance with the applicable emission limits for each pollutant. If 3 consecutive annual tests demonstrate compliance for a pollutant, then Zinpro may submit

a construction permit application to reduce the annual testing requirement for the passing pollutant;
b. Restrict the production of the Availa Cu product;
c. Address the Formaldehyde emission limit exceedance by increasing the single hazardous air pollutant (SHAP) emission rate; and
d. Add control equipment monitoring parameters.

Zinpro shall provide any additional information deemed necessary by the department, consistent with 567 IAC 22.1(3) and 22.2(1), related to Permit Project No. 24-403, within 30 days of a written DNR request; and

2. Within 60 days of the date this Administrative Consent Order is signed by the Director, Zinpro shall develop, and submit for DNR approval, a Maintenance Plan for its EP 13 equipment and control equipment that adheres to the requirements of 567 IAC 21.8(2). Additionally, the plan shall include trigger levels for when additional maintenance activities will take place (such as temperature readings, visible emission observations, etc.); and

3. Within 30 days of the date this Administrative Consent Order is signed by the Director, Zinpro shall pay a penalty of $10,000.00.

## VI. PENALTY

Pursuant to the provisions of Iowa Code section 455B.109 and 567 IAC chapter 10, which authorize the director to assess administrative penalties, a penalty of $10,000.00 is assessed by this administrative consent order. The penalty must be paid within 60 days of the date this Administrative Consent Order is signed by the Director. The administrative penalty is determined as follows:

Iowa Code section 455B.146 authorizes the assessment of civil penalties of up to $10,000.00 per day of violation for the air quality violations involved in this matter. More serious criminal sanctions are also available pursuant to Iowa Code section 455B.146A.

Iowa Code section 455B.109 authorizes the Commission to establish by rule a schedule of civil penalties up to $10,000.00 that may be assessed administratively. The Commission has adopted this schedule with procedures and criteria for assessment of penalties through 567 IAC chapter 10. Pursuant to this rule, DNR has determined that the most effective and efficient means of addressing the above-cited violations is the issuance of an administrative consent order with a penalty. The administrative penalty assessed by this order is determined as follows:

Economic Benefit – 567 IAC chapter 10 requires that DNR consider the costs saved or likely to be saved by noncompliance. 567 IAC 10.30(1) states that where the violator received an economic benefit through the violation or by not taking timely compliance or corrective measures, DNR shall take enforcement action which includes penalties to offset the economic benefit. 567 IAC 10.30(1) further states that reasonable estimates of economic benefit should be made where clear data are not available.

Delaying equipment and control equipment cleaning and maintenance until stack tests are shown to be exceeding permitted emission limits has allowed Zinpro to realize cost savings from not replacing parts on control equipment and not cleaning out control equipment. The RTO required significant maintenance and replacement parts to be installed in May of 2024.

Zinpro informed the DNR that the facility will no longer produce Availa Cu. Zinpro has gained financial benefit by producing both the Availa 4 and Availa Cu products for sale while operating in violation of the VOC, Single HAP, PM, and PM10 emission limits. The actual amount of financial gain is not known to the DNR.

For the reasons stated above $4,000.00 is assessed for this factor.

Gravity of the Violation – Harm to the environment and public health may have occurred due to the amount of VOC, Single HAP, PM, and PM10 that the Zinpro facility in Garner has emitted above the emission limits set forth in Construction Permit No. 07-A-1269-S3, which was issued by DNR for the Ring Dryer, EP 13.

Zinpro Garner has shown to be operating EP 13 while significantly emitting in violation of the permitted Single HAP emission limit for Benzene, Acetaldehyde, Formaldehyde, Toluene, and Propionaldehyde. HAPs are a subset of VOCs, and the gravity of the violation is higher when excess HAP emissions occur.

For the reasons stated above, $3,000.00 is assessed for this factor.

Culpability – Due to the April 10, 2023, complaint, DNR performed a site visit on April 14, 2023, and identified potential emission issues at the facility.

DNR staff performed another investigation on September 27, 2023, due to a DNR staff member observing visible emissions on September 7, 2023, and September 25, 2023. Following the September 7, 2023, visible emissions incident Zinpro stopped production to investigate equipment for issues and found none. Zinpro did not act to address emissions issues until DNR required the

facility to stack test EP 13, and those stack tests demonstrated significant emission limit violations on EP 13.

DNR had made Zinpro aware of emission issues at the facility since at least April of 2023. Zinpro continued to operate EP 13 despite knowledge of the emission issues.

For the reasons stated above, $3,000.00 is assessed for this factor.

## VII. WAIVER OF APPEAL RIGHTS

This administrative consent order is entered into knowingly and with the consent of Zinpro. For that reason, Zinpro waives its right to appeal this order or any part thereof.

## VIII. NONCOMPLIANCE

Failure to comply with this administrative consent order, including failure to timely pay any penalty, may result in the imposition of further administrative penalties or referral to the attorney general to obtain injunctive relief and civil penalties pursuant to Iowa Code section 455B.146. Compliance with Section "V. Order" of this administrative consent order constitutes full satisfaction of all requirements pertaining to the specific violations described in Section "IV. Conclusions of Law" of this administrative consent order.

Kayla Lyon

Digitally signed by Kayla Lyon
Date: 2025.12.12 17:06:57 -06'00'

Kayla Lyon, Director
Iowa Department of Natural Resources

Zinpro Corporation
Patrick Brunner, Chief Operating Officer

Dated this 9 day of December, 2025.

DNR Air Quality Bureau; DNR Field Office 2

IOWA DEPARTMENT OF NATURAL RESOURCES

GOVERNOR, KIM REYNOLDS
LT. GOVERNOR, CHRIS COURNOYER
DIRECTOR, KAYLA LYON

April 16, 2026

Mr. Ben Deaver
Zinpro Corp.
880 East Lyon Street
Garner, IA 50438

RE: ACO No. 2025-AQ-18 EP 13 Maintenance Plan
Facility # 41-02-010

Dear Mr. Deaver,
On March 26, 2026, The Iowa Department of Natural Resources (DNR) received a revised maintenance plan related to the thermal oxidizer and cyclone equipment associated with the Ring Dryer (EP 13) located at Zinpro Corporation in Garner Iowa (Zinpro Garner). Zinpro Garner submitted the maintenance plan for DNR approval to satisfy the requirement of ACO No. 2025-AQ-18 paragraph V(2).

The updated maintenance plan submitted on March 26, 2026 is approved by the DNR.

If you have any questions feel free contact me at (515) 343-6589 or at mark.fields@dnr.iowa.gov .

Sincerely,

Mark Fields
Air Quality Bureau

cc: Field Office 2

# Maintenance Plan

***Pursuant to 567 IAC 21.8(2)***
***Last Updated: 03/23/2026***

## Equipment associated with EP13- Ring Oxidizer E-19560 and Cyclones E-21007 and E-21006

***Document Intent:*** Describe the key equipment elements to inspect and maintain supporting EP13.

**EP13 Maintenance Plan, Ring Oxidizer E-19560 and Cyclones E-21007 and E-21006:**

| Description | Preventative Maintenance Activities | Frequency | Persons Responsible | Work Order |
|---|---|---|---|---|
| Cyclone Leak Inspection | - Inspect seams for deterioration, erosion, and/or leaking<br>- Inspect ducting/ flange connections to the cyclone for leaks<br>- Create follow-up WOs as needed for equipment repair or replacement | Quarterly | Zinpro Operations & Maintenance | WO 0151926 |
| Oxidizer Leak Inspection | - Inspect the exterior for erosion, corrosion, cracks, missing insulation and section joint leaks<br>- Inspect door construction welds, bolt condition and the seal for integrity<br>- Inspect outside ducting<br>- Create follow-up WOs as needed for equipment repair or replacement | Quarterly | Zinpro Operations & Maintenance | WO 0151929 |
| Burner Chamber Preventative Maintenance & Inspection | - Inspect tubes for damage and blow out tubes in first chamber if needed<br>- Inspect end plate, door seal, heat exchanger, burner, insulation, and expanded metal and straps<br>- Clean oxidizer burner pick<br>- Create follow-up WOs as needed for equipment repair or replacement | Bi-weekly | Zinpro Operations & Maintenance | WO 0124447 |
| Oxidizer Preventative Maintenance & Inspection | - Clean Expansion Joints<br>- Clean Heat Exchanger tubes<br>- Inspect burner for fouling & buildup<br>-Inspect heat exchanger for tube wear and damage<br>-Inspect insulation and expanded metal supports<br>- Create follow-up WOs as needed for equipment repair or replacement | Quarterly | Zinpro Operations & Maintenance | WO 86116 |
| Burner Tuning | - Combustion and leak check | Annually | Outside Contractor | WO 140783 |
| Ring Dryer Cyclone Preventative Maintenance & Inspection | Level probes detecting buildup or blockage<br>- Remove probe<br>- Clean and inspect<br>- Test for function following the sensor manual instruction. Repair or replace as needed | Monthly | Zinpro Maintenance | WO 0145061 |
| Exhaust Fan Maintenance (Cyclone) | - Check vibrations and temperature of bearing at each point<br>- Grease bearings and motor<br>- Check condition and tension of belts and replace them as needed | Quarterly | Zinpro Operations & Maintenance | WO0086042 |

**EP13 Critical Spare/ Replacement Parts List:**

| Part Description | Stock Quantity | Location |
|---|---|---|
| 1.5" DIA x 122" OAL Heat Exchanger Tubes | 1152 each, in stock | Garner |
| 4" DIA x 126" OAL Heat Exchanger Tubes | 138 each, in stock | Garner |
| Pressure Transducer, E&H PMP51-9WVP8/0 | 1 each, in stock | Garner |
| Temperature Transmitter, Pyromation KK43U-030-00-6HN34 DUAL TYPE K | 1 each, in stock | Garner |
| Temperature Controller, Honeywell S7800 | 1 each, in stock | Garner |
| Cyclone probe, FT21010 | 1 each, in stock | Garner |

**Thermal Oxidizer (TO) and Cyclone Monitoring:**

| Equipment & Process Condition | Normal Operating Range | Trigger Point | Method for Monitoring | Recording Keeping | Action |
|---|---|---|---|---|---|
| TO: TE-K1A Burner Chamber Temperature Transmitter | 1310+ degrees F | Below 1310 degrees F | TE-K1A transmitter | Temperature is documented at least once per shift in the Operator Log. | Stop production, investigate cause, and take action to correct temperature. |
| TO: Daily visual inspection of oxidizer stack for 30 seconds during operation. | 0% opacity | Any visible emissions above 0% opacity | Visual inspection | At least one daily visual observation is documented in the Operator Log. | Stop production, investigate cause, and take action to correct opacity. |
| Cyclone: Three-hour average air flow rate | 37,000+ SCFM | <37,000 & >48,750 SCFM | Transmitter | Air flow is documented at least once per hour and averaged every three hours in the Operator Log. | Stop production. Record the time, date, and actions taken to correct the situation. Record when the flow rate returns to compliance. |

**EP13 Contingency Plan:**

If we exceed the opacity trigger, fall below 1310 degrees F, or outside of 37,000- 48,750 SCFM the process will be shut down for investigation. All associated corrective actions will be recorded and retained for at least two years.

# Appendix C
# Executive Order (EO10) Rules Crosswalk

| Previous Chapter Number (Prior to 5/15/2024) | Current Chapter Number | Previous Title and Description (Prior to 5/15/2024) | Current Title and Description | Actions Taken |
|---|---|---|---|---|
| **20** | **20 (Reserved)** | Scope of Title - Definitions | N/A | **Definitions moved** to Ch. 21, 22 and 23.<br><br>**Rescinded** Ch. 20. (Reserved) |
| **21** | **21** | Compliance | Compliance, Excess Emissions, and Measurement of Emissions | **Kept and combined** with rules from Chapters 24, 25, 26, and 29. |
| **22** | **22** | Controlling Pollution-Permits | Controlling Air Pollution - Construction Permitting | **Kept construction permit rules and combined** with Ch. 20 (definitions) and Ch. 28 (NAAQS).<br><br>**Moved operating permit rules** to Chapter 24. |
| **22.100 - 22.300(12)** | **(New) 24** | N/A | Operating Permits | **Moved operating permit rules** from Ch. 22 to Ch. 24. |
| **23** | **23** | Emission Standards | Air Emission Standards | **Kept** |
| **24** | **(New) 21** | Excess Emissions | Compliance, Excess Emissions, and Measurement of Emissions | **Moved rules and combined** with Ch. 21.<br><br>**Moved TV rules** here (to Ch. 24). |
| **25** | **(New) 21** | Emissions Measurement | Compliance, Excess Emissions, and Measurement of Emissions | **Moved rules and combined** with Ch. 21.<br><br>**Rescinded** Ch. 25. (Reserved) |
| **26** | **(New) 21** | Emergency Air Pollution Episodes | Compliance, Excess Emissions, and Measurement of Emissions | **Moved rules and combined** with Ch. 21.<br><br>**Rescinded** Ch. 26. (Reserved) |
| **27** | **27** | Local Program Acceptance | Local Program Acceptance | **Kept** |
| **28** | **22** | NAAQS | N/A | **Moved rules and combined** with Ch. 22.<br><br>**Rescinded** Ch. 28. (Reserved) |
| **29** | **(New) 21** | Opacity Qualifications | Compliance, Excess Emissions, and Measurement of Emissions | **Moved rules and combined** with Ch. 21.<br><br>**Rescinded** Ch. 29. (Reserved) |
| **30** | **30** | Fees | Fee | **Kept** |
| **31** | **31** | Nonattainment Areas | Nonattainment New Source Review | **Kept** |
| **32** | **N/A** | AFO Field Study | N/A | **Rescinded** Ch. 32. (Reserved) |
| **33** | **33** | Special regulations and construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD) of air quality | Construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD) | **Kept** |
| **34** | **N/A** | Emissions Trading-CAIR-CAMR | N/A | **Rescinded** Ch. 34. (Reserved) |
| **35** | **N/A** | Grant Assistance Programs | N/A | **Rescinded** Ch. 35. (Reserved) |

| Previous Chapter Number (Priorto 5/15/2024) | Current Chapter Number | Previous Title and Description (Prior to 5/15/2024) | Current Title and Description | Actions Taken |
|---|---|---|---|---|
| **20** | **20 (Reserved)** | **Scope of Title - Definitions** | **N/A** | **Definitions moved** to Ch. 21, 22 and 23.<br><br>**Rescinded** Ch. 20. (Reserved) |
| 20.1 | N/A | Scope of title | N/A | |
| 20.2 | Ch. 21, 22, 23 | Definitions | Definitions | See beginning of Ch. 21, 22, and 23 |
| 20.3 | N/A | Air quality forms generally | N/A | |

| | | | | |
|---|---|---|---|---|
| **21** | **21** | **Compliance** | **Compliance, Excess Emissions, and Measurement of Emissions** | **Kept and combined** with rules from Chapters 24, 25, 26, and 29. |
| 21.1 | 21.1 | Compliance Schedule | Definitions and compliance requirements | Added definitions from Ch. 21, some language updated |
| 21.2 | 21.2 | Variances | Variances | Some language updated |
| 21.3 | 21.3 | Emission reduction program | Reserved | Reserved |
| 21.4 | 21.4 | Circumvention of rules | Circumvention of rules | Minor language updated |
| 21.5 | 21.5 | Evidence used in establishing that a violation has or is occurring | Evidence used in establishing that a violation has occurred or is occurring | 21.5(2) Reserved, some language updated |
| 21.6 | 21.6 | Temporary electricity generation for disaster situations | Temporary electricity generation for disaster situations | Minor language updated |
| 24.1 | 21.7 | Excess emission reporting | Excess emission reporting | Moved from Ch. 24, some language updated |
| 24.2 | 21.8 | Maintenance and repair requirements | Maintenance and repair requirements | Moved from Ch. 24, some language updated |
| N/A | 21.9 | N/A | Compliance with other requirements | New language |
| 25.1 | 21.10 | Testing and sampling of new and existing equipment | Testing and sampling of new and existing equipment | Moved from Ch. 25, some language updated |
| 25.2 | 21.11 | Continuous emission monitoring under the acid rain program | Continuous emission monitoring under the acid rain program | Moved from Ch. 25, some language updated |
| 25.3 | N/A | Mercury emissions testing and monitoring | N/A | Rescinded. Except 25.3(5) |
| 25.3(5) | 21.12 | Affected sources subject to Section 112(g) | Affected sources subject to Section 112(g) | Moved from Ch. 25, some language updated |
| 29.1 | 21.13 | Methodology and qualified observer | Methodology and qualified observer | Moved from Ch. 29, some language updated |
| 26.1 | 21.14 | Prevention of air pollution emergency episodes - General | Prevention of air pollution emergency episodes | Moved from Ch. 26, some language updated |
| 26.2 | 21.15 | Episode criteria | Episode criteria | Moved from Ch. 26, some language updated |
| 26.3 | 21.16 | Preplanned abatement strategies | Preplanned abatement strategies | Moved from Ch. 26, some language updated |
| 26.4 | 21.17 | Actions taken during episodes | Actions taken during episodes | Moved from Ch. 26, some language updated |
| Ch 26 Table III | Table I | Abatement strategies emission reduction actions alert level | Abatement strategies emission reduction actions alert level | Moved from Ch. 26, reference federal appendix table |
| Ch 26 Table IV | Table II | Abatement strategies emission reduction actions warning level | Abatement strategies emission reduction actions warning level | Moved from Ch. 26, reference federal appendix table |
| Ch 26 Table V | Table III | Abatement strategies emission reduction actions emergency level | Abatement strategies emission reduction actions emergency level | Moved from Ch. 26, reference federal appendix table |

| | | | | |
|---|---|---|---|---|
| **22** | **22** | **Controlling Pollution-Permits** | **Controlling Air Pollution - Construction Permitting** | **Kept construction permit rules and combined** with Ch. 20 (definitions) and Ch. 28 (NAAQS).<br><br>**Moved operating permit rules** to Chapter 24. |
| 22.1 | 22.1 | Permits required for new or existing stationary sources | Definitions and permit requirements for new or existing stationary sources | Added definitions from Ch. 20, some language updated |
| 22.2 | 22.2 | Processing permit applications | Processing permit applications | |
| 22.3 | 22.3 | Issuing permits | Issuing permits | |
| 22.4 | 22.4 | Special requirements for major stationary sources located in areas designated attainment or unclassified (PSD) | Major stationary sources located in areas designated attainment or unclassified (PSD) | |
| 22.5 | 22.5 | Special requirements for nonattainment areas | Major stationary sources located in areas designated Nonattainment | |
| 22.6 | 22.6 | Nonattainment area designations | Reserved | |

| Previous Chapter Number (Prior to 5/15/2024) | Current Chapter Number | Previous Title and Description (Prior to 5/15/2024) | Current Title and Description | Actions Taken |
|---|---|---|---|---|
| 22.7 | 22.7 | Alternative emission control program | Alternative emission control program | |
| 22.8 | 22.8 | Permit by rule | Permit by rule | |
| 22.9 | 22.9 | Special requirements for visibility protection | Special requirements for visibility protection | A lot of language updated or removed |
| 22.10 | 22.10 | Permitting requirements for country grain elevators, country grain terminal elevators, grain terminal elevators and feed mill equipment | Permitting requirements for country grain elevators, country grain terminal elevators, grain terminal elevators and feed mill equipment | |
| 28.1 | 22.11 | Ambient air quality standards - Statewide standards | Ambient air quality standards | Moved from Ch. 28, minor language updated |
| 22.12 to 22.99 | N/A | Reserved | N/A | Removed |

| **22.100 - 22.300(12)** | **(New) 24** | **N/A** | **Operating Permits** | **Moved operating permit rules** from Ch. 22 to Ch. 24. |
|---|---|---|---|---|
| 22.100 | 24.100 | Definitions for Title V operating permits | Definitions for Title V operating permits | Moved from Ch. 22, some language updated, many 40 CFR 70 definitions adopted by reference |
| 22.101 | 24.101 | Applicability of Title V operating permit requirements | Applicability of Title V operating permit requirements | Moved from Ch. 22, some language updated to correct punctuation and remove old dates |
| 22.102 | 24.102 | Source category exemptions | Source category exemptions | Moved from Ch. 22, some language updated to correct punctuation |
| 22.103 | 24.103 | Insignificant activities | Insignificant activities | Moved from Ch. 22, some language updated to correct typos and remove old dates |
| 22.104 | 24.104 | Requirement to have a Title V permit | Requirement to have a Title V permit | Moved from Ch. 22, some language updated no changes to rule text |
| 22.105 | 24.105 | Title V permit applications | Title V permit applications | Moved from Ch. 22, updated language to address electronic submissions and remove past application due dates |
| 22.106 | 24.106 | Annual Title V emissions inventory | Annual Title V emissions inventory | Moved from Ch. 22, no changes to rule text |
| 22.107 | 24.107 | Title V permit processing procedures | Title V permit processing procedures | Moved from Ch. 22, some language updated to update locations of public records and remove old CFR amendment dates |
| 22.108 | 24.108 | Permit content | Permit content | Moved from Ch. 22, some language updated to correct punctuation, remove old dates, and adopt 40 CFR 70 rules by reference |
| 22.109 | 24.109 | General permits | General permits | Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference |
| 22.110 | 24.110 | Changes allowed without a Title V permit revision (off-permit revisions) | Changes allowed without a Title V permit revision (off-permit revisions) | Moved from Ch. 22, some language updated to remove redundant language |
| 22.111 | 24.111 | Administrative amendments to Title V permits | Administrative amendments to Title V permits | Moved from Ch. 22, no changes to rule text |
| 22.112 | 24.112 | Minor Title V permit modifications | Minor Title V permit modifications | Moved from Ch. 22, no changes to rule text |
| 22.113 | 24.113 | Significant Title V permit modifications | Significant Title V permit modifications | Moved from Ch. 22, no changes to rule text |
| 22.114 | 24.114 | Title V permit reopenings | Title V permit re-openings | Moved from Ch. 22 to Ch. 24, some language updated to adopt 40 CFR 70 rules by reference |
| 22.115 | 24.115 | Suspension, termination, and revocation of Title V permits | Suspension, termination, and revocation of Title V permits | Moved from Ch. 22, no changes to rule text |
| 22.116 | 24.116 | Title V permit renewals | Title V permit renewals | Moved from Ch. 22, no changes to rule text |
| 22.117-22.119 | 24.117-24.119 | Reserved | Reserved | Moved from Ch. 22, no changes to rule text |
| 22.120 | 24.120 | Acid rain program—definitions | Acid rain program—definitions | Moved from Ch. 22, some language updated to remove old CFR amendment dates and address electronic submissions |
| 22.121 | 24.121 | Measurements, abbreviations, and acronyms | Reserved | Moved from Ch. 22, no changes to rule text |
| 22.122 | 24.122 | Applicability | Applicability | Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference |
| 22.123 | 24.123 | Acid rain exemptions | Acid rain exemptions | Moved from Ch. 22, some language updated to correct punctuation |
| 22.124 | 24.124 | Retired units exemption | Reserved | Moved from Ch. 22, no changes to rule text |
| 22.125 | 24.125 | Standard requirements | Standard requirements | Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference |
| 22.126 | 24.126 | Designated representative—submissions | Designated representative—submissions | Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference |
| 22.127 | 24.127 | Designated representative—objections | Designated representative—objections | Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference |
| 22.128 | 24.128 | Acid rain applications—requirement to apply | Acid rain applications—requirement to apply | Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference |

| Previous Chapter Number (Prior to 5/15/2024) | Current Chapter Number | Previous Title and Description (Prior to 5/15/2024) | Current Title and Description | Actions Taken |
|---|---|---|---|---|
| 22.129 | 24.129 | Information requirements for acid rain permit applications | Information requirements for acid rain permit applications | Moved from Ch. 22, no changes to rule text |
| 22.130 | 24.130 | Acid rain permit application shield and binding effect of permit application | Acid rain permit application shield and binding effect of permit application | Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference |
| 22.131 | 24.131 | Acid rain compliance plan and compliance options—general | Acid rain compliance plan and compliance options—general | Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference |
| 22.132 | 24.132 | Repowering extensions | Reserved | Moved from Ch. 22, no changes to rule text |
| 22.133 | 24.133 | Acid rain permit contents—general | Acid rain permit contents—general | Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference |
| 22.134 | 24.134 | Acid rain permit shield | Acid rain permit shield | Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference |
| 22.135 | 24.135 | Acid rain permit issuance procedures—general | Acid rain permit issuance procedures—general | Moved from Ch. 22, no changes to rule text |
| 22.136 | 24.136 | Acid rain permit issuance procedures—completeness | Acid rain permit issuance procedures—completeness | Moved from Ch. 22, no changes to rule text |
| 22.137 | 24.137 | Acid rain permit issuance procedures—statement of basis | Acid rain permit issuance procedures—statement of basis | Moved from Ch. 22, no changes to rule text |
| 22.138 | 24.138 | Issuance of acid rain permits | Issuance of acid rain permits | Moved from Ch. 22, some language updated to remove old dates and deadlines |
| 22.139 | 24.139 | Acid rain permit appeal procedures | Acid rain permit appeal procedures | Moved from Ch. 22, no changes to rule text |
| 22.140 | 24.140 | Permit revisions—general | Permit revisions—general | Moved from Ch. 22, some language updated to remove old dates |
| 22.141 | 24.141 | Permit modifications | Permit modifications | Moved from Ch. 22, no changes to rule text |
| 22.142 | 24.142 | Fast-track modifications | Fast-track modifications | Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference |
| 22.143 | 24.143 | Administrative permit amendment | Administrative permit amendment | Moved from Ch. 22, some language updated to remove fax option |
| 22.144 | 24.144 | Automatic permit amendment | Automatic permit amendment | Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference |
| 22.145 | 24.145 | Permit reopenings | Permit re-openings | Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference |
| 22.146 | 24.146 | Compliance certification—annual report | Compliance certification—annual report | Moved from Ch. 22, no changes to rule text |
| 22.147 | 24.147 | Compliance certification—units with repowering extension plans | Reserved | Moved from Ch. 22, no changes to rule text |
| 22.148 | 24.148 | Sulfur dioxide opt-ins | Sulfur dioxide opt-ins | Moved from Ch. 22, some language updated to update the 40 CFR Part 74 amendment date |
| 22.149 - 22.199 | 24.149 - 24.299 | Reserved | Reserved | Moved from Ch. 22, no changes to rule text |
| 22.200 | 24.200 - 24.299 | Definitions for voluntary operating permits | Reserved | Moved from Ch. 22, no changes to rule text |
| 22.201 | 24.200 - 24.299 | Eligibility for voluntary operating permits | Reserved | Moved from Ch. 22, no changes to rule text |
| 22.203 | 24.200 - 24.299 | Voluntary operating permit applications | Reserved | Moved from Ch. 22, no changes to rule text |
| 22.204 | 24.200 - 24.299 | Voluntary operating permit fees | Reserved | Moved from Ch. 22, no changes to rule text |
| 22.205 | 24.200 - 24.299 | Voluntary operating permit processing procedures | Reserved | Moved from Ch. 22, no changes to rule text |
| 22.206 | 24.200 - 24.299 | Permit content | Reserved | Moved from Ch. 22, no changes to rule text |
| 22.207 | 24.200 - 24.299 | Relation to construction permits | Reserved | Moved from Ch. 22, no changes to rule text |
| 22.208 | 24.200 - 24.299 | Suspension, termination, and revocation of voluntary operating permits | Reserved | Moved from Ch. 22, no changes to rule text |
| 22.209 | 24.200 - 24.299 | Change of ownership for facilities with voluntary operating permits | Reserved | Moved from Ch. 22, no changes to rule text |
| 22.210 - 22.299 | 24.200 - 24.299 | Reserved | Reserved | Moved from Ch. 22, no changes to rule text |
| 22.300 | 24.300 | Operating permit by rule for small sources | Operating permit by rule for small sources | Moved from Ch. 22, no changes to rule text |

| **23** | **23** | **Emission Standards** | **Air Emission Standards** | **Kept** |
|---|---|---|---|---|
| 23.1 | 23.1 | Emission standards | Emission standards | Kept, language updated, tables used |
| 23.2 | 23.2 | Open burning | Open burning | Kept, some language updated |
| 23.3 | 23.3 | Specific contaminants | Specific contaminants | Kept, some language updated |
| 23.4 | 23.4 | Specific processes | Specific processes | Kept, some language updated |
| 23.5 | 23.5 | Anaerobic lagoons | Anaerobic lagoons | Kept, some language updated |
| 23.6 | 23.6 | Alternative emission limits (the “bubble concept”) | Reserved | Removed |

| Previous Chapter Number (Priorto 5/15/2024) | Current Chapter Number | Previous Title and Description (Prior to 5/15/2024) | Current Title and Description | Actions Taken |
|---|---|---|---|---|
| **24** | **(New) 21** | **Excess Emissions** | **Compliance, Excess Emissions, and Measurement of Emissions** | **Moved rules and combined** with Ch. 21.<br><br>**Moved operating permit rules** here (to Ch. 24)**.** |
| 24.1 | 21.7 | Excess emission reporting | Excess emission reporting | Moved from Ch. 24, some language updated |
| 24.2 | 21.8 | Maintenance and repair requirements | Maintenance and repair requirements | Moved from Ch. 24, some language updated |
| **25** | **(New) 21** | **Emissions Measurement** | **Compliance, Excess Emissions, and Measurement of Emissions** | **Moved rules and combined** with Ch. 21.<br><br>**Rescinded** Ch. 25. (Reserved) |
| 25.1 | 21.10 | Testing and sampling of new and existing equipment | Testing and sampling of new and existing equipment | Moved from Ch. 25, some language updated |
| 25.2 | 21.11 | Continuous emission monitoring under the acid rain program | Continuous emission monitoring under the acid rain program | Moved from Ch. 25, some language updated |
| 25.3 | | Mercury emissions testing and monitoring | N/A | Rescinded. Except 25.3(5) |
| 25.3(5) | 21.12 | Affected sources subject to Section 112(g) | Affected sources subject to Section 112(g) | Moved from Ch. 25, some language updated |
| **26** | **(New) 21** | **Emergency Air Pollution Episodes** | **Compliance, Excess Emissions, and Measurement of Emissions** | **Moved rules and combined** with Ch. 21.<br><br>**Rescinded** Ch. 26. (Reserved) |
| 26.1 | 21.14 | Prevention of air pollution emergency episodes - General | Prevention of air pollution emergency episodes | Moved from Ch. 26, some language updated |
| 26.2 | 21.15 | Episode criteria | Episode criteria | Moved from Ch. 26, some language updated |
| 26.3 | 21.16 | Preplanned abatement strategies | Preplanned abatement strategies | Moved from Ch. 26, some language updated |
| 26.4 | 21.17 | Actions taken during episodes | Actions taken during episodes | Moved from Ch. 26, some language updated |
| Ch 26 Table III | Table I | Abatement strategies emission reduction actions alert level | Abatement strategies emission reduction actions alert level | Moved from Ch. 26, reference federal appendix table |
| Ch 26 Table IV | Table II | Abatement strategies emission reduction actions warning level | Abatement strategies emission reduction actions warning level | Moved from Ch. 26, reference federal appendix table |
| Ch 26Table V | Table III | Abatement strategies emission reduction actions emergency level | Abatement strategies emission reduction actions emergency level | Moved from Ch. 26, reference federal appendix table |
| **27** | **27** | **Local Program Acceptance** | **Local Program Acceptance** | **Kept** |
| 27.1 | 27.1 | General | General | Kept, some language updated |
| 27.2 | 27.2 | Certificate of acceptance | Certificate of acceptance | Kept, some language updated |
| 27.3 | 27.3 | Ordinance or regulations | Ordinance or regulations | Kept, some language updated |
| 27.4 | 27.4 | Administrative organization | Administrative organization | Kept, some language updated |
| 27.5 | 27.5 | Program activities | Program activities | Kept, some language updated |
| **28** | **22** | **NAAQS** | **N/A** | **Moved rules and combined** with Ch. 22.<br><br>**Rescinded** Ch. 28. (Reserved) |
| 28.1 | 22.11 | Ambient air quality standards - Statewide standards | Ambient air quality standards | **Moved from Ch. 28**, minor language updated<br><br>**Rescinded** Ch. 28. (Reserved) |
| **29** | **(New) 21** | **Opacity Qualifications** | **Compliance, Excess Emissions, and Measurement of Emissions** | **Moved rules and combined** with Ch. 21.<br><br>**Rescinded** Ch. 29. (Reserved) |
| 29.1 | 21.13 | Methodology and qualified observer | Methodology and qualified observer | Moved from Ch. 29, some language updated |

| Previous Chapter Number (Prior to 5/15/2024) | Current Chapter Number | Previous Title and Description (Prior to 5/15/2024) | Current Title and Description | Actions Taken |
|---|---|---|---|---|
| **30** | **30** | **Fees** | **Fee** | **Kept** |
| 30.1 | 30.1 | Purpose | Purpose | Kept, language updated |
| 30.2 | 30.2 | Fees associated with new source review applications | Fees associated with new source review applications | Kept, some language updated |
| 30.3 | 30.3 | Fees associated with asbestos demolition or renovation notification | Fees associated with asbestos demolition or renovation notification | Kept, some language updated |
| 30.4 | 30.4 | Fees associated with Title V operating permits | Fees associated with Title V operating permits | Kept, some language updated |
| 30.5 | 30.5 | Fee advisory groups | Fee advisory groups | Kept, language updated |
| 30.6 | 30.6 | Process to establish or adjust fees and notification of fee rates | Process to establish or adjust fees and notification of fee rates | Kept, some language updated |
| 30.7 | 30.7 | Fee revenue | Reserved | Language removed |

| | | | | |
|---|---|---|---|---|
| **31** | **31** | **Nonattainment Areas** | **Nonattainment New Source Review** | **Kept** |
| 31.1 | 31.1 | Permit requirements relating to nonattainment areas | Permit requirements relating to nonattainment areas | Kept, some language updated |
| 31.2 | 31.2 | Conformity of general federal actions to the Iowa state implementation plan or federal implementation plan - Rescinded | Reserved | Language removed |
| 31.3 | 31.3 | Nonattainment new source review requirements for areas designated nonattainment on or after May 18, 1998 | Nonattainment new source review (NNSR) requirements for areas designated nonattainment | Kept, some language updated |
| 31.4 | 31.4 | Preconstruction review permit program | Preconstruction review permit program | Kept |
| 31.5 - 31.8 | 31.5 - 31.8 | Reserved | Reserved | Kept |
| 31.9 | 31.9 | Actuals PALs | Actuals PALs | Kept, some language updated |
| 31.10 | 31.10 | Validity of rules | Validity of rules | Kept |
| 31.11 - 31.19 | N/A | Reserved | N/A | Rescinded and removed |
| 31.20 | N/A | Special requirements for nonattainment areas designated before May 18, 1998 | N/A | Rescinded and removed |

| | | | | |
|---|---|---|---|---|
| **32** | **N/A** | **AFO Field Study** | **N/A** | **Rescinded** Ch. 32. (Reserved) |
| 32.1 | N/A | Animal feeding operations field study | N/A | Rescinded, reserved, and language removed |
| 32.2 | N/A | Definitions | N/A | Rescinded, reserved, and language removed |
| 32.3 | N/A | Exceedance of the health effects value (HEV) for hydrogen sulfide | N/A | Rescinded, reserved, and language removed |
| 32.4 | N/A | Exceedance of the health effects standard (HES) for hydrogen sulfide | N/A | Rescinded, reserved, and language removed |
| 32.5 | N/A | Iowa Air Sampling Manual | N/A | Rescinded, reserved, and language removed |

| | | | | |
|---|---|---|---|---|
| **33** | **33** | **Special regulations and construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD) of air quality** | **Construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD)** | **Kept** |
| 33.1 | 33.1 | Purpose | Purpose | Kept, some language updated |
| 33.2 | 33.2 | Reserved | Reserved | Kept |
| 33.3 | 33.3 | Special construction permit requirements for major stationary sources in areas designated attainment or unclassified (PSD) | PSD construction permit requirements for major stationary sources | Kept, some language updated |
| 33.4 - 33.8 | 33.4 - 33.8 | Reserved | Reserved | Kept |
| 33.9 | 33.9 | Plantwide applicability limitations (PALs) | Plantwide applicability limitations (PALs) | Kept, some language updated |
| 33.10 | 33.10 | Exceptions to adoption by reference | Exceptions to adoption by reference | Kept, some language updated |

| Previous Chapter Number (Prior to 5/15/2024) | Current Chapter Number | Previous Title and Description (Prior to 5/15/2024) | Current Title and Description | Actions Taken |
|---|---|---|---|---|
| **34** | **N/A** | **Emissions Trading-CAIR-CAMR** | **N/A** | **Rescinded** Ch. 34. (Reserved) |
| 34.1 | N/A | Purpose | N/A | Rescinded, reserved, and language removed |
| 34.2 - 34.199 | N/A | Reserved | N/A | Rescinded, reserved, and language removed |
| 34.200 | N/A | Provisions for air emissions trading and other requirements for the Clean Air Interstate Rule (CAIR) - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.201 | N/A | CAIR NOx annual trading program general provisions - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.202 | N/A | CAIR designated representative for CAIR NOx sources - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.203 | N/A | Permits - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.204 | N/A | Reserved | N/A | Rescinded, reserved, and language removed |
| 34.205 | N/A | CAIR NOx allowance allocations - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.206 | N/A | CAIR NOx allowance tracking system - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.207 | N/A | CAIR NOx allowance transfers - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.208 | N/A | Monitoring and reporting - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.209 | N/A | CAIR NOx opt-in units - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.210 | N/A | CAIR SO2 trading program - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.211 - 34.219 | N/A | Reserved | N/A | Rescinded, reserved, and language removed |
| 34.220 | N/A | CAIR NOx ozone season trading program - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.221 | N/A | CAIR NOx ozone season trading program general provisions - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.222 | N/A | CAIR designated representative for CAIR NOx ozone season sources - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.223 | N/A | CAIR NOx ozone season permits - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.224 | N/A | Reserved | N/A | Rescinded, reserved, and language removed |
| 34.225 | N/A | CAIR NOx ozone season allowance allocations - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.226 | N/A | CAIR NOx ozone season allowance tracking system - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.227 | N/A | CAIR NOx ozone season allowance transfers - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.228 | N/A | CAIR NOx ozone season monitoring and reporting - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.229 | N/A | CAIR NOx ozone season opt-in units - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.230 - 34.299 | N/A | Reserved | N/A | Rescinded, reserved, and language removed |
| 34.300 | N/A | Provisions for air emissions trading and other requirements for the Clean Air Mercury Rule (CAMR) - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.301 | N/A | Mercury (Hg) budget trading program general provisions - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.302 | N/A | Hg designated representative for Hg budget sources - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.303 | N/A | General Hg budget trading program permit requirements - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.304 | N/A | Hg allowance allocations - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.305 | N/A | Hg allowance tracking system - rescinded | N/A | Rescinded, reserved, and language removed |

| Previous Chapter Number (Prior to 5/15/2024) | Current Chapter Number | Previous Title and Description (Prior to 5/15/2024) | Current Title and Description | Actions Taken |
|---|---|---|---|---|
| 34.306 | N/A | Hg allowance transfers - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.307 | N/A | Monitoring and reporting - rescinded | N/A | Rescinded, reserved, and language removed |
| 34.308 | N/A | Performance specifications - rescinded | N/A | Rescinded, reserved, and language removed |
| **35** | **N/A** | **Grant Assistance Programs** | **N/A** | **Rescinded** Ch. 35. (Reserved) |
| 35.1 | N/A | Purpose | N/A | Rescinded, reserved, and language removed |
| 35.2 | N/A | Definitions | N/A | Rescinded, reserved, and language removed |
| 35.3 | N/A | Role of the department of natural resources | N/A | Rescinded, reserved, and language removed |
| 35.4 | N/A | Eligible projects | N/A | Rescinded, reserved, and language removed |
| 35.5 | N/A | Forms | N/A | Rescinded, reserved, and language removed |
| 35.6 | N/A | Project selection | N/A | Rescinded, reserved, and language removed |
| 35.7 | N/A | Funding sources | N/A | Rescinded, reserved, and language removed |
| 35.8 | N/A | Type of financial assistance | N/A | Rescinded, reserved, and language removed |
| 35.9 | N/A | Term of loans | N/A | Rescinded, reserved, and language removed |
| 35.10 | N/A | Reduced award | N/A | Rescinded, reserved, and language removed |
| 35.11 | N/A | Fund disbursement limitations | N/A | Rescinded, reserved, and language removed |
| 35.12 | N/A | Applicant cost share | N/A | Rescinded, reserved, and language removed |
| 35.13 | N/A | Eligible costs | N/A | Rescinded, reserved, and language removed |
| 35.14 | N/A | Ineligible costs | N/A | Rescinded, reserved, and language removed |
| 35.15 | N/A | Written agreement | N/A | Rescinded, reserved, and language removed |
| 35.16 | N/A | Financial assistance denial | N/A | Rescinded, reserved, and language removed |

# Iowa Department of Natural Resources
# Draft Title V Operating Permit Fact Sheet

This document has been prepared to fulfill the public participation requirements of 40 CFR Part 70 and 567 Iowa Administrative Code (IAC) 24.107(6). 40 CFR Part 70 contains operating permit regulations pursuant to Title V of the Clean Air Act.

---

The Iowa Department of Natural Resources (DNR) finds that:

1. Zinpro Corporation, located at 880 East Lyons Street has applied for a Title V Operating Permit. The designated responsible official of this facility is Mr. Adam Hunter.
2. Zinpro Corporation is a prepared feeds manufacturer. This facility consists of 9 Title V applicable emission units with potential emissions of:

| **Pollutant** | **Abbreviation** | **Potential Emissions (Tons per Year)** |
|---|---|---|
| Particulate Matter (≤ 2.5 μm) | $PM_{2.5}$ | 73.01 |
| Particulate Matter (≤ 10 μm) | $PM_{10}$ | 73.01 |
| Particulate Matter | PM | 73.01 |
| Sulfur Dioxide | $SO_2$ | 0.09 |
| Nitrogen Oxides | $NO_x$ | 15.46 |
| Volatile Organic Compounds | VOC | 39.11 |
| Carbon Monoxide | CO | 12.99 |
| Lead | Lead | 0.00 |
| Hazardous Air Pollutants (1) | HAP | 24.00 |
| Single HAP | SHAP | 9.00 |

(1) May include the following: Hydrochloric Acid.

3. Zinpro Corporation submitted a Title V Operating Permit application on October 9, 2023. Based on the information provided in these documents, DNR has made an initial determination that the facility meets all the applicable criteria for the issuance of an operating permit specified in 567 IAC 24.107.
4. DNR has complied with the procedures set forth in 567 IAC 24.107, including those regarding public notice, opportunity for public hearing, and notification of EPA and surrounding state and local air pollution programs.

---

DNR procedures for reaching a final decision on the draft permit:

1. The public comment period for the draft permit will run from June 11, 2026 through July 11, 2026. During the public comment period, anyone may submit written comments on the permit. Mail signed comments to Derek Wedemeier at the DNR address shown below. The beginning date of this public comment period also serves as the beginning of the U.S. Environmental Protection Agency's (EPA) 45-day review period, provided the EPA does not seek a separate review period.
2. Written requests for a public hearing concerning the permit may also be submitted during the comment period. Any hearing request must state the person's interest in the subject matter, and the nature of the issues proposed to be raised at the hearing. DNR will hold a public hearing upon finding, on the basis of requests, a significant degree of relevant public interest in a draft permit. Mail hearing requests to Derek Wedemeier at the DNR address shown below.
3. DNR will keep a record of the issues raised during the public participation process, and will prepare written responses to all comments received. The comments and responses will be compiled into a responsiveness summary document. After the close of the public comment period, DNR will make a final decision on the initial application. The responsiveness summary and the final permit will be available to the public upon request.

   DEREK WEDEMEIER
   IOWA DEPARTMENT OF NATURAL RESOURCES - AIR QUALITY BUREAU
   6200 PARK AVE
   STE #200
   DES MOINES, IOWA 50321
   Phone: (515) 725-9520
   E-mail: Derek.Wedemeier@dnr.iowa.gov

---

DNR concludes that:

1. DNR has authority under 455B.133 Code of Iowa to promulgate rules contained in 567 IAC Chapters 21-33, including, but not limited to, rules containing emission limits, providing for compliance schedules, compliance determination methods and issuance of permits.
2. DNR has the authority to issue operating permits for air contaminant sources and to include conditions in such permits under 455B.134 Code of Iowa.
3. The emission limits included in this permit are authorized by 455B.133 Code of Iowa and 567 IAC Chapters 21-33.
4. DNR is required to comply with 567 IAC Chapter 24 in conjunction with issuing a Title V Operating Permit.
5. The issuance of this permit does not preclude the DNR from pursuing enforcement action for any violation.

Title V Application Review Notes

| | |
|---|---|
| Applicant: | **Zinpro Corporation** |
| SIC Code: | 2048 |
| City: | Garner |
| County: | Hancock |
| EIQ#: | 92-7009 |
| Facility#: | 41-02-010 |
| Permit #: | 26-TV-00# |
| Reviewer: | Derek Wedemeier |
| Date: | **DATE** |

**Facility Identification**

| | |
|---|---|
| Facility Name: | **Zinpro Corporation** |
| Facility Location: | 800 E Lyons St, Garner, IA 50438 |
| Responsible Official: | Adam Hunter |
| Phone: | 641-923-7848 |

**Background**

The Title V initial application was received 10/9/2023. A portion of this facility is subject to 40 CFR 63 Subpart VVVVVV - National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources. Pursuant to 567 IAC 24.101(1)"c" any source that is required to obtain a Title V operating permit solely because of a NESHAP requirement, and which is not a major source, is required to obtain a Title V permit only for the emission unit(s) and related equipment causing the source to be subject to the Title V program. There are other emission units at this facility that are not included in the Title V operating permit. The facility has 9 emission units with 7 emission points subject to Title V.

**Title V Applicability**

| Pollutant | Major for Title V? |
|---|---|
| $PM_{10}$ | ☐ |
| $SO_2$ | ☐ |
| $NO_x$ | ☐ |
| VOC | ☐ |
| CO | ☐ |
| Lead | ☐ |
| Individual HAP | ☐ |
| Total HAPs | ☐ |

Potential emissions of criteria pollutants and HAP's from this facility do not exceed major source thresholds. A portion of this facility is subject to 40 CFR 63 Subpart VVVVVV and 63.11494"e" states "Any area source that installed a federally-enforceable control device on an affected CMPU is required to obtain a permit under 40 CFR part 70 or 40 CFR part 71 if the control device on the affected CMPU is necessary to maintain the source's emissions at area source levels." The portion of the facility that is included in this Title V permit are considered to

be CMPU's by the Subpart due to the use of metal HAP in the processes greater than the threshold value defined in 63.11494(a)(2)(i).

**Program Applicability:**

- PSD: NO
- 40 CFR Part 60 NSPS: NO
- 40 CFR Part 61 NESHAP: NO
- 40 CFR Part 63 NESHAP: YES
    - Subpart A-General Provisions
    - Subpart VVVVVV - National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources
    - Subpart DDDDDDD - National Emission Standards for Hazardous Air Pollutants for Area Sources: Prepared Feeds Manufacturing
- Acid Rain and CSAPR: NO
- Stratospheric Ozone Protection: NO
- Prevention of Accidental Release: NO

**Emission Estimations**

The potential emissions calculations were based off of construction permit limits, AP-42 emission factors, stack test data, mass balance and engineering estimates provided by the facility. The 500 ppmv allowable $SO_2$ SIP limit overestimates the potential emissions. The AP-42 emission factors for $SO_2$, if available, were used instead and provide a more realistic potential value when compared to the previous year's emissions inventory.

**Emission Values**

| PM | $PM_{10}$ | $PM_{2.5}$ | $SO_2$ | $NO_x$ | VOC | CO | Lead | Total HAPs* |
|---|---|---|---|---|---|---|---|---|
| **Potential Emissions*** | | | | | | | | |
| 73.01 | 73.01 | 73.01 | 0.09 | 15.46 | 39.11 | 12.99 | 0.00 | 24.0 |
| **Actual Emissions 2025** | | | | | | | | |
| 18.33 | 18.07 | 12.92 | 0.07 | 12.69 | 12.71 | 10.66 | 0.00 | 10.21 |

*Facility-wide PTE includes Title V subject units only. 2025 reported emissions include totals from all emission units at the facility.

**Emission Point Specific Comments**

1. A Portion of the facility is subject to 40 CFR 63 Subpart VVVVVV - National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources. This was established in construction project 22-361. This includes construction permits 07-A-1272-S4, 07-A-1275-S3, 19-A-246-S2, 95-A-848-S2, and 97-A-521-S3.
2. This facility is minor for PSD for all criteria pollutants.
3. CAM does not apply as this is an initial Title V permit and the Facility is not a major source according to Part 70.

EP 07(G) and EP 08(H): Reactor 1 & 2

One stack test for Hydrochloric Acid (HCl) is recommended for each emission point based on periodic monitoring guidance (PMG). The facility reports "Reactor 1 does not and will not handle HCl" during their review of the Title V permit draft. Operating conditions for each emission point require daily record keeping of hours of operation and monthly calculations to determine HCl emissions, continuous monitoring of the scrubber parameters, and daily control equipment record keeping. Maintaining the control equipment according to manufacturer specifications, along with these operating and record keeping requirements, will satisfy the PMG testing requirement for the initial Title V permit term. The operating conditions listed within the permit are consistent with the minimum requirements of an Agency O&M plan.

EP 13(M): Ring Dryer

Construction permit modification for 07-A-1269-S4 on 3/4/2026. Changes included increasing the SHAP limit, modifying the operating and monitoring conditions, and corrections to the emission point characteristics. The changes to the construction permit were the result of compliance and testing issues that were addressed in Administrative Consent Order No. 2025-AQ-18. Stack testing is required for PM-State, PM10, VOC, and HAP. No additional testing will be required by the Title V for this unit in the initial Title V permit. ACO 2025-AQ-18 requires a development of a O&M plan for the control equipment. Agency O&M has been marked "Yes" to include the O&M plan from the ACO. It is located in Appendix B. Condition 5.L. of construction permit 07-A-1269-S4 was completed on April 4, 2026 so it has not been included in the Title V. The facility submitted a construction permit application to replace the Ring Dryer in May 2026. This construction permit has not been issued at this time.

Periodic monitoring guidance suggests testing and monitoring however the conditions and testing requirements listed in the construction permit satisfy the need for any additional monitoring for this unit in the initial Title V permit term.

EP 16 (P): Reactor 3 & 4

Periodic monitoring guidance recommends 1 stack test for HCl. The HCl limit was established in 2020 with the S3 version of the construction permit under project 20-057. The emission limit was determined using a conservative loss rate of 1% and a safety factor of 2 according to the engineering evaluation. Testing was previously completed in 2019 for Opacity, PM, PM10, VOC, and HAP; not including HCl. Similar to EP08, operating conditions require continuous monitoring of control equipment parameters including scrubber flow rate and pH, along with daily record keeping and monthly calculations. Maintaining the control equipment according to manufacturer specifications, along with these operating and record keeping requirements, will satisfy the PMG testing requirement for this initial Title V permit term. The operating conditions listed within the permit are consistent with the minimum requirements of an Agency O&M plan.

EP 22(V): Evaporator & P3 PCS Spray Dryer

Construction permit 16-A-318-S2 does not specifically list NESHAP VVVVVV in Section 4. Federal Standards. This unit is subject to NESHAP VVVVVV based on correspondence within the engineering evaluation for project 22-361. The facility has included this as an applicable NESHAP in the Application Forms 542-1044. The facility shall comply with the applicable requirements of the NESHAP VVVVVV and DDDDDDD.

The facility submitted a construction permit modification to amend the rated capacity to 3.8 MMbtu/hr and add a rated capacity for CE 22C thermal oxidizer on May 1, 2026.

Stack testing was most recently completed for PM and VOC on 9/27/2018. PM test average was 1.35 lb/hr, 88% of the emission limit, and VOC test average was 1.0 lb/hr, 20% of the emission limit. Periodic monitoring guidance suggests one test be completed for PM, PM10, and VOC. Due to the level of compliance of the VOC results from the VOC stack test, VOC testing will not be required during the initial Title V permit term. PM stack testing suggested by PMG will not be required during this review because the facility demonstrated compliance with a passing test in 2018 and the operating requirements within the permit. Daily monitoring of the thermal oxidizer and continuous monitoring and daily record keeping of the venturi scrubber is required within the permit. The conditions in the operational limits are consistent with the minimum requirements of an Agency O&M so no additional periodic monitoring will be required in the initial Title V permit term.

EP 28(AB): Fluid Bed Dryer

This unit is subject to the requirements of NESHAP VVVVVV based on correspondence within the engineering evaluation for project 22-361. This unit meets the definition of a chemical manufacturing process, utilize control equipment to maintain an area source status, and the raw materials contain manganese/chromium. The facility has included this as an applicable NESHAP in the Application Forms 542-1044. The facility shall comply with the applicable requirements of the NESHAP VVVVVV and DDDDDDD.

Periodic monitoring suggests a facility O&M plan along with one stack test for PM. The PM emission limits is based on 0.01 gr/dscf according to project 20-057. Baghouses are regularly capable of achieving levels well below this level. The conditions listed in the operational limits require continuous monitoring for pressure drop (1-6" of water column) across the baghouse, daily recordkeeping and requirements to maintain the control equipment according to manufacturer specifications which should ensure the equipment is well maintained. These requirements will satisfy the PMG testing requirement for this initial Title V permit. The operating conditions listed within the permit are consistent with the minimum requirements of an Agency O&M plan.

EP 30(AD): Reactor 5

Construction Permit 19-A-246-S3 was modified and issued on 5/29/2024 to remove all references to Reactor No. 6. Emission limits were reduced to account for the removed emission unit. The facility shall comply with the applicable requirements of the NESHAP VVVVVV and DDDDDDD. Similar to EP08, operating conditions require continuous monitoring of control equipment parameters including scrubber flow rate and pH, along with daily record keeping, and monthly calculations. Maintaining the control equipment according to manufacturer specifications, along with these operating and record keeping requirements, will satisfy the PMG testing requirement for this initial Title V permit. The operating conditions listed within the permit are consistent with the minimum requirements of an Agency O&M plan.

**Facility-Wide Limits**

The construction permits for the emission units at this facility place Facility-Wide emission limits of 9.4 tons/year of any single HAP and 24.4 tons/year for total HAP emissions. The Title

V permit places these emission limits and the associated record-keeping in the Plant-Wide Conditions section. These emissions apply both to the equipment included in the Title V permit and those not subject to Title V requirements. The facility shall consider emissions from all source at the facility when certifying compliance with these limits.

**Periodic Monitoring**

Operation & Maintenance plans have not been required for the control equipment included in this permit because the requirements placed on the equipment through the construction permits and 40 CFR 63 Subpart VVVVVV and DDDDDDD place appropriate requirements on the operations of the control equipment.

**Compliance Assurance Monitoring (CAM)**

CAM does not apply to any sources at the facility because the facility in not considered major for Title V and this is the initial Title V permit.