Iowa Department of Natural Resources Title V Operating Permit

Name of Permitted Facility: Guardian Industries, LLC

Facility Location: 300 South 5th Ave. East, Dewitt, IA 52742

Air Quality Operating Permit Number: 99-TV-059R4

Expiration Date: December 31, 2028 Permit Renewal Application Deadline: June 30, 2028

EIQ Number: 92-6864

Facility File Number: 23-02-013

Responsible Official

Name: Adam Gravert Title: Plant Manager

Mailing Address: 300 South 5th Ave. East, Dewitt, IA 52742

Phone #: (563) 202-2736

Permit Contact Person for the Facility

Name: Kyle Mock Title: EHS Manager

Mailing Address: 300 South 5th Ave. East, Dewitt, IA 52742

Phone #: (785) 893-4235

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

For the Director of the Department of Natural Resources

Mainil Stein 1/01/2024

1

Marnie Stein, Supervisor of Air Operating Permits Section

Table of Contents

I.	Facility Description and Equipment List
II.	Plant - Wide Conditions6
III.	Emission Point Specific Conditions8
IV.	General Conditions
	G1. Duty to Comply
	G2. Permit Expiration
	G3. Certification Requirement for Title V Related Documents
	G4. Annual Compliance Certification
	G5. Semi-Annual Monitoring Report
	G6. Annual Fee
	G7. Inspection of Premises, Records, Equipment, Methods and Discharges
	G8. Duty to Provide Information
	G9. General Maintenance and Repair Duties
	G10. Recordkeeping Requirements for Compliance Monitoring
	G11. Evidence used in establishing that a violation has or is occurring.
	G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification
	G13. Hazardous Release
	G14. Excess Emissions and Excess Emissions Reporting Requirements
	G15. Permit Deviation Reporting Requirements
	G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations
	G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification
	G18. Duty to Modify a Title V Permit
	G19. Duty to Obtain Construction Permits
	G20. Asbestos
	G21. Open Burning
	G22. Acid Rain (Title IV) Emissions Allowances
	G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements
	G24. Permit Reopenings
	G25. Permit Shield
	G26. Severability
	G27. Property Rights
	G28. Transferability
	G29. Disclaimer
	G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification
	G31. Prevention of Air Pollution Emergency Episodes
	G32. Contacts List

Abbreviations

acfm	. actual cubic feet per minute
CFR	. Code of Federal Regulation
CE	. control equipment
CEM	. continuous emission monitor
°F	
	. emissions inventory questionnaire
EP	. emission point
EU	
gr./dscf	grains per dry standard cubic foot
IAC	. Iowa Administrative Code
IDNR	. Iowa Department of Natural Resources
MVAC	. motor vehicle air conditioner
NAICS	North American Industry Classification System
	new source performance standard
ppmv	. parts per million by volume
lb./hr	
	pounds per million British thermal units
SCC	. Source Classification Codes
	standard cubic feet per minute
SIC	. Standard Industrial Classification
TPY	
USEPA	. United States Environmental Protection Agency
Pollutants	
PM	
	. particulate matter ten microns or less in diameter
SO ₂	
NO _x	. nitrogen oxides
VOC	. volatile organic compound
CO	
HAP	. hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: Guardian Industries - Dewitt

Permit Number: 99-TV-059R3

Facility Description: Float Glass Production (SIC 3211)

Equipment List

Emission Emission Point Unit Number Number		Emission Unit Description	Construction Permit Number	
BH01	RMS1	Raw Material Silos	95-A-152	
F001	MF1	Melt Furnace	95-A-154-P6	
F001	AL1	Lift Out Roll SO ₂ Applicator	93-A-134-P0	
C001	CRS1	Cullet Return System	99-A-299P	
SSS1	SSS1	Sorbent Storage Silo	16-A-061-S1	
DDS1	DDS1	ECD Dust Day Cile	16-A-059-S1	
DDS1b	וצעע	ESP Dust Day Silo	17-A-617	
DH01	DH01	ESP Dust Hopper & Bag Unloading Station	16-A-060	
E001	DEG01	Diesel Emergency Generator #1	99-A-300-P2	
E002	DEG02	Diesel Emergency Generator #2	99-A-301-P2	
E003	EMWS	Diesel Emergency Water Pump	NA	
BLDG1	MS01	Cutting Fluid Application	NA	
DEGFS	DEGFS	Diesel Fuel Storage Tank	99-A-302	
CT01	CT01	Hot End Cooling Tower	15-A-509	
MBLFS1	MBLFS1	Mobile Gasoline Storage	NA	

Insignificant Activities Equipment List

Insignificant Emission	Insignificant Emission Unit Description
Unit Number	•
BHDP	Batch House Dump Pit
BHVM	Batch House Vacuum
INKJT	Inkjet Printer for Marking Defective Glass
MBLFS2	Mobile Diesel Fuel Storage (500 gallons)
MSSTO	Mineral Spirits Storage (2,000 gallons)
NGINS	11 Natural Gas Fired Units (<10MMBtu/hr each)
TPSO2	Tempering Furnace (Electric) SO ₂
SEPDC	Glass Sheet Separation Dust Collector
COATB	Coating Line Beads
TPPD	Tempering Line Powder
SAND	Sand Blaster
BEDC	Bucket Elevator Dust Collector
TDCS	Transport Dust Collectors
CSDC	Cullet Silo Dust Collector
USDC	Unload Shed Dust Collector
CT02	Coater Cooling Tower
MBLFS3	Kerosene Tank (500 gallons)

II. Plant-Wide Conditions

Facility Name: Guardian Industries, LLC

Permit Number: 99-TV-059R4

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

Permit Duration

The term of this permit is: Five (5) years from permit issuance

Commencing on: December 28, 2023

Ending on: December 27, 2028

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

Emission Limits

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

Opacity (visible emissions): 40% opacity

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

<u>Sulfur Dioxide (SO₂):</u> 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"

<u>Fugitive Dust:</u> 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.

7

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

III. Emission Point-Specific Conditions

Facility Name: Guardian Industries, LLC

Permit Number: 99-TV-059R4

Emission Point ID Number: BH01

Associated Equipment

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
RMS1	Raw Material Silos	CE 703: 9 Baghouses	Sand, Limestone, Soda Ash, Salt Cake, Dolomite, Slag, Cullet, EP Dust	750 tons/day glass pulled	95-A-152

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.

8

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: PM₁₀

Emission Limit(s): 0.076 lb/hr.

Authority for Requirement: DNR Construction Permit 95-A-152

Pollutant: Particulate Matter Emission Limit(s): 0.1 gr/dscf

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

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

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🛛 No 🗌
Compliance Assurance Monitoring (CAM) Plan Required?	Yes ☐ No ⊠

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

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: F001

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Monitoring Equipment	Raw Material	Rated Capacity	Construction Permit
MF1	Float Glass Melting Furnace	Electrostatic Precipitator (CE ESP1),	F001SCR1NOX- 1: NO _x SCR Input F001SCR1O2-1: O ₂ SCR Input F001SCR1NOX-	Sand, Limestone, Sodium Carbonate, Glass, Calcium Carbonate, Slag		
AL1	Lift Out Roll SO ₂ Applicator	Dry Scrubber (CE DSI1), Selective Catalytic Reduction (CE SCR1)	2: NO _x SCR Output F001SCR1O2-2: O ₂ SCR Output F001VF-1: Flow from F001 exhaust stack F0011SO2-1: SO ₂	Glass, SO ₂	750 tons/day, float glass	95-A-154-P6

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-154-P6

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter – Federal

Emission Limit(s): 0.45 lb/ton

Authority for Requirement: DNR Construction Permit 95-A-154-P6

40 CFR 60 Subpart CC 567 IAC 23.1(2)"dd"

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

Civil Action Number 15-cv-13426-MAG-MJH

Pollutant: Particulate Matter - State

Emission Limit(s): 31.2 lb/hr., 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 95-A-154-P6

567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv, 1.2 lb/ton⁽²⁾, 3,720 lb/day⁽³⁾, 292.74 tons/yr. Authority for Requirement: DNR Construction Permit 95-A-154-P6

567 IAC 23.3(3)"e"

Civil Action Number 15-cv-13426-MAG-MJH

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 8,357 lb/day⁽⁴⁾, 1,288.53 tons/yr., 80% reduction⁽²⁾ Authority for Requirement: DNR Construction Permit 95-A-154-P6

Civil Action Number 15-cv-13426-MAG-MJH

Pollutant: Lead (Pb)

Emission Limit(s): 0.12 lb/hr.

Authority for Requirement: DNR Construction Permit 95-A-154-P6

Pollutant: Sulfuric Acid Mist (H₂SO₄)

Emission Limit(s): 1.6 lb/hr.

Authority for Requirement: DNR Construction Permit 95-A-154-P6

Civil Action Number 15-cv-13426-MAG-MJH

Pollutant: Total HAP

Emission Limit(s): 0.5 lb/hr.

Authority for Requirement: DNR Construction Permit 95-A-154-P6

⁽²⁾ Limit is a 30-day rolling average. Limit does not apply during Furnace startup, control device startup, maintenance or malfunction, or abnormally low production rate days as allowed in Conditions E, F, H, I and J below.

⁽³⁾ Limit is a 24-hour block average. Limit applies during control device outage as allowed in conditions H & I below.

⁽⁴⁾ Limit is a 24-hour block average. Limit applies during control device outage as allowed in conditions E & F below.

BACT Limits

Pollutant: PM₁₀

Emission Limit(s): 150 lb/hr.⁽⁵⁾

Authority for Requirement: DNR Construction Permit 95-A-154-P6

Pollutant: Sulfur Dioxide (SO₂) Emission Limit(s): 60 lb/hr.⁽⁵⁾

Authority for Requirement: DNR Construction Permit 95-A-154-P6

Pollutant: Nitrogen Oxides (NO_x) Emission Limit(s): 325 lb/hr.⁽⁵⁾

Authority for Requirement: DNR Construction Permit 95-A-154-P6

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.

General Requirements:

- A. The owner or operator shall not use arsenic or Metal HAPs as raw materials at the facility.
 - (1) The owner or operator shall maintain on-site manufacturer and vendor provided information (Safety Data Sheets, technical data sheets, etc.) for all raw materials used in the process covered by this permit.
- B. All stack gases shall, at all times, pass through the control devices in this permit, except during Furnace Startup; Control Device Startup; Malfunction of the Electrostatic Precipitator (PD), Dry Scrubber (DS), or Selective Catalytic Reduction (SCR); or Maintenance of the PD, DS, or SCR.
- C. The SCR shall be designed for a NO_x removal efficiency of at least 90 percent. The owner or operator shall operate and maintain the SCR in accordance with good air pollution practice for minimizing emissions to the extent practicable, consistent with 40 CFR §60.11(d), taking into consideration the Ammonia Slip.
- D. For no more than 40 Days allowed for Furnace Startup, the Furnace exhaust may bypass the SCR and/or the DS to avoid having the operating inlet temperature of the SCR or DS fall below its operational range. During these bypass Days, the facility shall burn in the Furnace no more than five million standard cubic feet of natural gas per day. When technically feasible and available, the facility shall operate the SCR and the DS on the Furnace exhaust.

⁽⁵⁾ Limits do not apply during Furnace startup, control device startup, maintenance or malfunction, or abnormally low production rate days as allowed in Conditions E, F, H, I, and J.

Nitrogen Oxides (NO_x) Emissions Requirements:

- E. For each operating day that the SCR does not operate or is not operating normally due to Control Device Startup or Malfunction of the SCR, DS, or PD for any period of time, the facility may exclude the Removal Efficiency for that Day from the 30-Day Rolling Average NO_x Removal Efficiency. During the Days that are excluded from the 30-Day Rolling Average NO_x Removal Efficiency, a NO_x CEMS shall be used to demonstrate compliance with a 24-hour Block Average of 8,357 pounds.
- F. For any Operating Day when Maintenance on the Canals, SCR, DS, or PD is performed, the facility may exclude the Maintenance Day from the 30-Day Rolling Average NO_x Removal Efficiency. For any day that is excluded from the 30-Day Rolling Average NO_x Removal Efficiency, a NO_x CEMS shall be used to demonstrate compliance on a 24-hour Block Average with the following pound per Day limit:

$$NO_{X SCR Maint} = \frac{MH \times 8357}{24} + \frac{NH \times 8357 \times 0.2}{24}$$

Where: $NO_{x \text{ SCR Maint}} = NO_x$ emission limit (in pounds per Day) for the Furnace during Maintenance of the Canals, SCR, DS, or ESP

MH = Hours of Maintenance

NH = Normal Hours = 24 - MH

- (1) The owner or operator shall calculate and record the NO_x emissions during maintenance activities excluded from the 30-day rolling average on a pounds per day basis.
- G. The owner or operator may elect to use the following Alternative Compliance Option in lieu of complying with the NO_x emission limits and controls required in Emission Limits section, provided that the owner or operator satisfies the requirements below.
 - (1) If the owner or operator is able to reduce the 30-day Rolling Average Rate into the SCR to less than 8.0 pounds NO_x per ton of glass produced for at least 180 consecutive days or normal operation (excluding periods that qualify as Maintenance, Malfunction, Furnace Startup, Control Device Startup, or Abnormally Low Production Rate Days) and it elects to comply with a 30-day Rolling Average Emission Rate of 1.6 pounds NO_x per ton of glass produced (measured after the SCR) in lieu of the final NO_x emission standard of 80% reduction, the facility shall notify EPA and the Iowa DNR (IDNR), that it has decided to do so. The owner or operator shall comply with a 30-day Rolling Average Emission Rate of 1.6 pounds NO_x per ton of glass produced 60 Days after the owner or operator provides notice to EPA and the IDNR. After electing to comply with the alternative compliance option in this paragraph, the owner or operator may not revert to complying with the NO_x emission standard of 80% reduction. If EPA determines that the owner or operator has not satisfied any of the following criteria, the owner or operator shall continue complying with the

applicable final NO_x emission standard of 80% reduction.

- (2) The facility's notice shall include all 30-day rolling average data for NO_x for the 12-month period prior to the date the notice is submitted. The facility shall clearly identify the Days that it believes are exempted from the 30-day Rolling Average Emission Rate and shall indicate which exemption applies (i.e., Maintenance, Malfunction, Furnace Startup, Control device Startup, or Abnormally Low Production Rate Days).
- (3) The facility's notice shall identify any equipment that it installed and shall explain all actions that it took to achieve emissions reductions at the Furnace for which it seeks an Alternative Compliance Option. The owner or operator shall continue to operate any equipment and shall continue all actions necessary to maintain such emissions reductions.
- (4) The owner or operator may not elect to comply with an Alternative Compliance Option for the Furnace that has had any exceedances of the final NO_x emission limit of 80% reduction within the last 12 months prior to the election allowed by Condition G.
- (5) The owner or operator shall continue to operate the SCR at all times as required in the applicable conditions above. In addition, the owner or operator may comply with a NO_x limit for Abnormally Low Production Rate Days, which shall be calculated as follows:
 - a. The owner or operator shall exclude the NO_x emissions generated from the Furnace during an Abnormally Low Production Rate Day (or Days) from the 30-day Rolling Average Emission rate. During these Days, a CEMS shall be used to demonstrate the facility's compliance on a 24-hour Block Average with the following pound per Day limit:

$$NO_{X\,Abn} = 1.6 \frac{lb\,NO_X}{ton} \times \left[\frac{P}{0.35}\right]$$

Where:

NO_{x Abn} = NO_x emission limit (in pounds per Day) for the furnace using SCR during Days when an Abnormally Low Production Rate is occurring.

P = Furnace-specific production threshold of 265.2, in tons of glass produced per Day, based on furnace capacity of 750 tons/day.

Sulfur Dioxide (SO₂) Emissions Requirements:

H. For any Operating Day during Control Device Startup or on which a Malfunction of the DS or PD occurs, the owner or operator may exclude the emissions generated during that

Operating Day (or Days) from all Furnaces connected to that DS or PD from the 30-day Rolling Average Emission Rate. During the Day (or Days) excluded from the 30-day Rolling Average Emission Rate, a CEMS shall be used to demonstrate the facility's compliance with a 24-hour Block Average of 3,720 pounds SO₂ per day.

I. For any operating day when Maintenance on DS or PD is performed, the facility may exclude the emissions generated during that Operating Day (or Days) from the Furnace from the 30-day Rolling Average Emission Rate. During the Day (or Days) excluded from the 30-day Rolling Average Emission Rate, a CEMS shall be used to demonstrate the facility's compliance with the following pound per day SO₂ limit on a 24-hour Block Average:

$$SO_{2 \ Scrub \ Maint} = \frac{MH \times SO_{2 \ w/o \ DS}}{24} + \frac{NH \times \left[1.2 \times \left[\frac{P}{0.35}\right]\right]}{24}$$

Where: SO_{2 Scrub Maint} = SO₂ emission limit (in pounds per Day) for the furnace during maintenance DS or PD

 $SO_{2 \text{ w/o DS}} = 3720 \text{ lb/day}$

P = Furnace-specific production threshold of 265.2, in Tons of glass produced per Day, based on furnace capacity of 750 tons/day

MH = Hours of Maintenance

NH = Normal Hours = 24 - MH

J. When the Furnace is Operating at an Abnormally Low Production Rate, the facility may exclude the SO₂ emissions generated from the Furnace during that Operating Day (or Days) from the 30-day Rolling Average Emission Rate. During the Days excluded from the 30-day Rolling Average Emission rate, a SO₂ CEMS shall be used to demonstrate the facility's compliance with the following pound per day SO₂ limit on a 24-hour Block Average:

$$SO_{2\,Abn} = 1.2 \frac{lb\,SO_2}{ton} \times \left[\frac{P}{0.35}\right]$$

Where: SO_{2 Abn} = SO₂ emission limit (in pounds per Day) for the Furnace during days when an Abnormally Low Production Rate is occurring

P = Furnace-specific production threshold of 265.2, in Tons of glass produced per Day, based on furnace capacity of 750 tons/day

- (1) The owner or operator shall calculate and record SO₂ emissions when using the abnormally low production day equation.
- K. At all times, including during Maintenance, Malfunction, Furnace Startup, Control Device Startup, or Abnormally Low Production Rate Days, the facility shall maintain and

operate the Furnace, all control devices, and any other associated air pollution control equipment in accordance with 40 CFR §60.11(d).

Recordkeeping Requirements:

- L. The owner or operator shall record:
 - (1) The hourly NO_x emissions (ppm_v) before and after the SCR as calculated using CEMS data.
 - (2) The hourly SO₂ emissions (pounds per hour) as calculated using CEMS data.
 - (3) The daily production rate.
 - (4) The 30-day Rolling Average Emissions (Removal Efficiency or Rate), if applicable.
- M. For any Operating Day(s) that the facility excludes from the relevant 30-day Rolling Average NO_x Removal Efficiency or 30-day Rolling Average NO_x or SO₂ Emission Rate, the facility shall record:
 - (1) The date.
 - (2) The relevant exception pursuant to which the facility is excluding the emissions generated during that Operating Day (or Days) (i.e., Maintenance, Malfunction, Furnace Startup, Control Device Startup, or Abnormally Low Production Rate Days).
 - (3) A calculation of the applicable emission limit (in pounds of NO_x and/or SO₂ per Day) according to Conditions E, F, G, H, I, and J.
 - (4) The emissions recorded by the CEMS (in pounds of NO_x and/or SO₂ per Day);
 - (5) If it was a Malfunction, an explanation and description of any corrective actions taken.
- N. For any Operating Day(s) excluded for Maintenance of a Control Device or Furnace, the facility shall also record the total number of hours during which Maintenance occurred.
- O. In addition to the recordkeeping requirements listed in Conditions L, M, and N, the facility shall also keep the following records during Furnace Startup.
 - (1) The amount of salt cake added to the batch materials in pounds per ton of total batch material (including cullet).
 - (2) The total natural gas usage in the Furnace (in million standard cubic feet).
 - (3) The excess oxygen percentage (as measured and recorded using a probe and a portable analyzer in the crown of each furnace regenerator at least once per shift).

(4) A description of whether thermal blankets or similar techniques were used during this period.

Maintenance for Canals and Control Devices Requirements:

- P. The owner or operator shall perform the following maintenance for canals and control devices:
 - (1) Scheduled or Preventive Maintenance on Control Devices. Any Operating hour that is exempted from the applicable 30-day Rolling Average Emission Rate because of Maintenance being performed on a Control Device is subject to the following restrictions and shall comply with the following requirements:
 - a. Schedule or preventive Maintenance of Control Device(s) shall occur and shall be completed while the Furnace connected to the Control Device(s) is not Operating, unless the Furnace connected to the Control Device(s) is scheduled to have a Continuous Operating Year.
 - b. During a Continuous Operating Year, scheduled or preventive Maintenance on the Control Device(s) may be conducted while the Furnace connected to the Control Device(s) is Operating.
 - c. All Control Device Maintenance occurring during a Continuous Operating year shall also be performed in accordance with the following requirements:
 - i. Maintenance on all add-on Control Devices shall not exceed 144 hours total per Calendar Year.
 - ii. Bypassing an SCR for the purpose of preventive Maintenance shall not exceed 144 hours per Calendar Year. Bypass of the SCR required as a result of bypassing the PD or DS shall count towards the 144-hour limit.
 - iii. Bypassing a PD for the purpose of preventive Maintenance shall not exceed 144 hours per Calendar Year. Furthermore, if a PD is bypassed, the associated DS and SCR shall be bypassed as well.
 - iv. Bypassing a DS for the purpose of preventive Maintenance shall not exceed 144 hours per Calendar Year. Bypass of the DS required as a result of bypassing the PD shall count towards the 144-hour limit.
 - (2) <u>Canal Changes</u>. No more than once every 2 Calendar Years, the facility is permitted 96 hours to complete a Canal Change on their downstream equipment. In the event a Canal Change becomes necessary in less than 2 Calendar Years, the facility shall notify EPA and the IDNR at least 30 days prior to the Canal Change

to provide the opportunity for the EPA and the IDNR to investigate the necessity of Canal Change and object. During this period, the Furnace will Operate at Abnormally Low Production Rate, good air pollution control practices shall be used at all times, the DS and PD (if technologically feasible for the catalyst-impregnated ceramic filter system) shall be operated, and the SCR shall be operated unless the inlet temperature or flow to the SCR drops to less than 115% of the minimum operating temperature or flow (as defined by the SCR vendor) for 15 consecutive minutes, and then the facility may discontinue use of the SCR until temperature and flow stabilize at 115% of the recommended minimums.

Applicable Definitions and Other Requirements:

- Q. The Furnace covered by this permit shall be fired by natural gas only.
 - (1) The owner or operator shall maintain a record of the type of fuel burned by the Furnace.
 - (2) Prior to burning any other fuel in this unit, the owner or operator shall apply for, and obtain, an amended construction permit from the Department.
- R. If increased production capacity at the Furnace is authorized by IDNR in the future through a revised permit limit, the applicable pound per day limit(s) in Conditions E and H for NO_x and SO₂, respectively, shall be increased using the following formula:

New Pound per Day Limit = Original Pound per Day Limit * COD_{New} / COD_{Old}

Where: COD_{New} = New Daily Glass Production, in tons of glass per day COD_{Old} = Original Daily Glass Production, in tons of glass per day

- S. The following definitions shall apply to terms in this permit.
 - (1) "Abnormally Low Production Rate" shall mean a glass production rate for the Furnace that is at or below 262.5 tons per day, which reflects 35 percent of the permitted production rate.
 - (2) "Abnormally Low Production Rate Day" shall mean any Operating Day where glass production at the Furnace occurs at or below the Abnormally Low Production Rate for at least one continuous hour.
 - (3) "Ammonia Slip" shall mean emissions of unreacted ammonia that result from incomplete reaction of NO_x and the reagent.
 - (4) "Calendar Year" shall mean the period commencing on January 1 and ending on December 31 of the same year.
 - (5) "Canal Change" shall mean the replacement of a refractory device used to transfer the molten glass from the Furnace to the forming process. Canal Change includes the stoppage of molten glass into the forming process, replacement, and installation of a new canal, heat-up of the canal, and restart of production.
 - (6) "CEMS" shall mean Continuous Emission Monitoring System.

- (7) "CEMS Certification" or "CEMS Re-Certification" shall mean the certification of a CEMS as required by 40 CFR §60.13, 40 CFR Part 60 Appendix B (Performance Specification 2), and 40 CFR Part 60 Appendix F (Quality Assurance Procedures).
- (8) "CEMS Certification Event" shall mean any event that triggers the requirement to complete a first CEMS Certification or subsequent CEMS Re-Certification.
- (9) "Cold Tank Repair" shall refer to the process of stopping glass production, stopping the flow of fuel, fully cooling down the Furnace, replacing some or all the refractory in the Furnace, the crown and/or the regenerators (if applicable), and beginning a new campaign by starting up the Furnace again by firing fuel again and starting the production of glass. Cold Tank Repair does not include any refractory repairs conducted when the Furnace is still hot, and repairs solely required for restart of the Furnace which has temporarily ceased operation due to economic reasons.
- (10) "Continuous Operating Year" shall mean a Calendar Year during which the Furnace that is connected to a Control Device Operates on every Day of that Calendar Year.
- (11) "Control Device" shall mean Selective Catalytic Reduction (SCR), Dry Scrubber (DS), Electrostatic Precipitator (PD), or similar add-on air pollution control device.
- (12) "Control Device Startup" shall mean the period of time from the initial commencement of operation of a Control Device until operation of the device is stable and the device has achieved normal operating conditions and shall not exceed 30 days. Control Device Startup does not include subsequent startups of the Control Device, unless the subsequent startup of the Control Device occurs during a restart after a downtime of more than six months.
- (13) "Daily Glass Production" shall mean the tons of glass produced per Day from the Furnace (commonly known as "pulled") as calculated by the measurement method or the weight method. It shall be calculated using a weighted average of approximately 12 samples taken throughout a Day to give a daily production rate.
- (14) "Day" shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this permit, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day. A Day starts at 12:00 a.m. and ends at 11:59 p.m.
- (15) "Dry Scrubber" and "DS" shall mean a pollution control system, sometimes referred to as a sorbent injection system, which involves the addition of an alkaline material into the gas stream to react with the acid gases. The acid gases react with the alkaline sorbents to form solid salts. There is no moisture added in the reaction chamber or reaction area. DSs include traditional add-on DS and ceramic filter systems.
- (16) "Furnace" shall mean a unit comprised of a refractory-lined vessel in which raw materials are charged and melted at high temperature to produce molten glass.
- (17) "Furnace Startup" shall mean the period of time during which the Furnace's refractory is heated from ambient temperature to Operating temperature. A Furnace Startup shall last no more than 40 Days and includes the slow heating of

- the Furnace refractory, initially with portable burners and transitioning to main burners once the Furnace reaches a temperature at which they can commence operation. Furnace Startup shall be considered complete the later of when (a) production commences or (b) when the operating inlet temperature of the DS reaches its operational range on a consistent basis. Furnace Startup also includes the initial filling of the Furnace, following the heat-up, with cullet and/or raw materials, to a level at which production launch can commence.
- (18) "Inlet" shall mean the concentration of NO_x (in ppm_v corrected to 7% O₂ unless the permit states otherwise) measured prior to an SCR.
- (19) "Installation of Controls" shall, solely for the purposes of this permit, include:
 - a. The installation of an SCR, DS, or PD; or
 - b. The installation of any alternative controls or alternative Primary Control Technology.
- (20) "Maintenance" shall mean activities necessary to keep Control Devices in normal operating condition, as described in Condition 5.P.
- (21) "Malfunction" shall mean, consistent with 40 CFR §60.2, any sudden, infrequent, and not reasonably preventable failure of a Control Device to operate in a normal or usual manner, but shall not include failures that caused in part by poor maintenance or careless operation.
- (22) "Operate," "Operation," "Operating," and "Operated" shall mean any time when fuel is fired in the Furnace.
- (23) "Operating Day" shall mean any day where any fuel is fired in the Furnace.
- (24) "Outlet" shall mean the NO_x concentration (in ppm_V corrected to 7% O₂ unless the permit states otherwise) measured after an SCR.
- (25) "Particulate Device" and "PD" shall mean a control device that uses filtration technology to reduce Particulate Matter emissions, including, but not limited to, electrostatic precipitators, baghouses, and ceramic filter systems.
- (26) "Particulate Matter" and "PM" shall mean any finely divided solid or liquid material, other than uncombined water, as measured using EPA Method 5 (40 CFR Part 60 Appendix A).
- (27) "Primary Control Technology" for NO_x, SO₂, PM, and H₂SO₄ shall mean any new process design, equipment or operating methodology that allows for the emissions limits to be met without the installation of a Control Device.
- (28) "Removal Efficiency" for NO_x shall mean the percent reduction in concentration of NO_x achieved by the Furnace's Control Device. This percent reduction shall be calculated by subtracting the Outlet concentration of NO_x (corrected to 7% O₂ unless the permit states otherwise) from the Inlet concentration of NO_x (corrected to 7% O₂ unless the permit states otherwise), dividing the difference by the Inlet concentration and then multiplying the result by 100.
- (29) "Selective Catalytic Reduction" and "SCR" shall mean a pollution control device that reacts ammonia (NH₃) or urea with NO_x to form nitrogen (N₂) and water (H₂O) using a catalyst to speed the reaction. SCRs include traditional add-on SCRs and catalyst-impregnated ceramic filters.
- (30) "Ton" and "Tons" shall mean short ton (equal to 2,000 pounds) or short tons.
- (31) "24-hour Block Average" shall be calculated by averaging all valid one-hour emissions data outputs (concentrations or pounds) for a given Operating Day and

using Daily Glass Production on that Operating Day where applicable.

(32) "30-day Rolling Average Emission Rate" shall be expressed as pounds of pollutant emitted per Ton of glass produced and calculated at the Furnace in accordance with the following formulate and subparagraphs a. and b. below.

$$30 - day \ average \ \frac{lb \ E}{Ton} = \frac{COD_E(lbs) + P29D_E(lbs)}{COD_{Prod}(Tons) + P29D_{Prod}(Tons)}$$

Where: 30-day average (lb E/Ton) = The 30-day Rolling Average Emission Rate

 $E = Emissions of NO_x or SO_2$

COD = Current Operating Day where the relevant 30-day Rolling Average Emission Rate is the applicable limit and the CEMS measures at least one full hour of emissions data.

 COD_E = The daily emissions as measured by a CEMS on the COD, in pounds

COD_{Prod} = Daily Glass Production on the COD in Tons of glass

P29D = The previous 29 Operating Days where the relevant 30-day Rolling Average Emission Rate is the applicable limit and the CEMS measures at least one full hour of emissions data.

 $P29D_E$ = The sum of the daily NO_x or SO_2 emissions as measured by a CEMS during the P29D, in pounds.

 $P29D_{Prod}$ = The sum of the Daily Glass Production during the P29D, in Tons of glass

- a. A new 30-day Rolling Average Emission Rate shall be calculated for each new Operating Day where the 30-day Rolling Average Emission Rate is the applicable standard and the CEMS measures at least one full hour of emissions data. Any Operating Day where the newly calculated 30-day Rolling Average Emission Rate exceeds the limit is a separate one Day violation; and
- b. As specified in Conditions D, E, F, H, I, and J of this permit, certain Abnormally Low Production Rate Days, Furnace and/or Control Device Startup Days, Malfunction Days, and Maintenance Days may be excluded from the 30-day Rolling Average Emission Rate.
- (33) "30-day Rolling Average NO_x Removal Efficiency" shall be calculated each Day where the 30-day Rolling Average NO_x Removal Efficiency is the applicable standard and the CEMS measures at least one full hour of emissions data. It is calculated by summing the Removal Efficiency 24-hour Block Averages from the Furnace for each Operating Day and previous 29 Operating Days when the 30-day Rolling Average NO_x Removal Efficiency was the applicable standard and the CEMS measured at least one full hour of emissions data and then dividing by 30. A new 30-day Rolling Average NO_x Removal Efficiency shall be calculated for

each new Operating Day. Any Operating Day where the newly calculated 30-day Rolling Average NO_x Removal Efficiency is less than the Removal Efficiency limit is a separate one-day violation.

Continuous Monitoring Systems (CMS)

- A. The owner or operator shall install, calibrate, certify, maintain, and operate NO_X CEMS (on both the Inlet and Outlet of the SCR) and SO₂ CEMS.
 - (1) The facility shall install, calibrate, certify, maintain, and operate all NO_x and SO₂ CEMS in accordance with the following requirements:
 - a. NO_x and SO₂ CEMS shall continuously monitor and record the hourly NO_x and SO₂ emission concentrations (in parts per million (ppm)) during each Operating Day at the Furnace. NO_x shall be corrected to 7% O2 basis.
 - b. NO_x and SO₂ CEMS shall be installed, calibrated, certified, maintained, and operated in accordance with 40 CFR §60.13, 40 CFR Part 60, Appendix B (Performance Specification 2), and 40 CFR Part 60, Appendix F (Quality Assurance Procedures).
 - c. The first CEMS Certification shall be required no later than the compliance deadlines specified above.
 - d. Events that will trigger CEMS re-Certification after the first CEMS Certification include any subsequent Furnace Startup or Control Device Startup. Guardian shall commence such CEMS Re-Certification no later than 30 Days after Furnace Startup concludes or a Control Device Startup period concludes. If a Furnace Startup and a Control Device Startup happen at the same time, then the CEMS Re-Certification shall not be conducted until the first Operating Day after the later startup event concludes.
 - (2) Where the permit requires the use of CEMS to determine compliance with an emission rate (i.e., pounds per ton, pounds per Day, or Tons per year), the data acquisition and handling system for the CEMS shall convert the ppm values into pounds per hour values using an O₂ CEMS or a flow monitor installed, calibrated, certified, maintained, and operated in accordance with 40 CFR §60.13, 40 CFR Part 60, Appendix B (Performance Specification 2 or 6, as applicable) and 40 CFR Part 60, Appendix F (Quality Assurance Procedures). At the end of each Operating Day, the data acquisition and handling system shall divide the total daily emissions in pounds per Day for valid CEMS hourly data by the total Tons of glass produced during the Operating Day (reduced proportionally based on the valid CEMS data hours) to describe the pound per ton emission rate for the Operating Day. The resulting number shall be recorded in units of pounds of

pollutant per ton of glass produced for the applicable Operating Day.

- B. For each hour of missing emission data (NO_x or SO₂), the owner or operator shall substitute data to demonstrate compliance with the NO_x or SO₂ 12-month rolling totals by:
 - (1) If the quarterly monitor data availability is equal to or greater than 95.0%, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
 - a. For the missing data period less than or equal to 24 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
 - b. For a missing data period greater than 24 hours, substitute the greater of:
 - i. The 90th percentile hourly concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or
 - ii. The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
 - (2) If the quarterly monitor data availability is at least 90.0% but less than 95.0%, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
 - a. For the missing data period of less than or equal to 8 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
 - b. For a missing data period of more than 8 hours, substitute the greater of:
 - i. The 95th percentile hourly pollutant concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or
 - ii. The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
 - (3) If the quarterly monitor data availability is less than 90.0%, the owner or operator shall obtain actual emission data by an alternate testing or monitoring method

approved by the Department.

Authority for Requirement: DNR Construction Permit 95-A-154-P6

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 298

Stack Opening, (inches, dia.): 102 Exhaust Flow Rate (scfm): 70,000 Exhaust Temperature (°F): 700

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 95-A-154-P6

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 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.

Stack Testing:

Pollutant – Particulate Matter (Federal)
Stack Test to be Completed by – June 2, 2024⁽¹⁾
Subsequent Stack Testing - Annual
Test Method - 40 CFR 60, Appendix A, Method 5
Authority for Requirement – DNR Construction Permit 95-A-154-P6

Pollutant – Sulfuric Acid Mist (H₂SO₄)

Stack Test to be Completed by – June 2, 2024⁽²⁾

Subsequent Stack Testing - Annual

Test Method - 40 CFR 60, Appendix A, EPA conditional test method CTM 13, 13A or B or approved alternative

Authority for Requirement – DNR Construction Permit 95-A-154-P6

- (1) Testing was completed on June 2, 2023
- (2) Testing completed on June 2, 2023

Continuous Emissions Monitoring:

Pollutant	Pollutant Compliance Methodology Frequency Test Run Time		Test Method	
SO_2	CEM	Continuous	30-Day Rolling Average, 12-month rolling total and 24- hour Block Average, as applicable	CEM ⁽¹⁾⁽³⁾
NO _x	CEM Continuous 30-Day Rolling Average, 12-month rolling total and 24- hour Block Average, as applicable		CEM ⁽²⁾⁽³⁾	

⁽¹⁾ Continuous Emission Monitoring Systems (CEMS) shall be used to demonstrate compliance with the 1.2 lb/ton limit.

Authority for Requirement: DNR Construction Permit 95-A-154-P6

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 25.1(7)

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required? Required for CE ESP1	Yes 🛛 No 🗌

Authority for Requirement: 567 IAC 22.108(3)

⁽²⁾ CEMS shall be used to demonstrate compliance with the 80% reduction limit.

⁽³⁾ See Operational Limits & Reporting/Record keeping Requirements section for CEMS requirements

CAM Plan for F001 ESP

CAM Plan for F001 ESP

I. Background

A. Emission Unit

Description: Float Glass Melting Furnace

Identification: Emission Unit: MF1

Control Equipment: ESP1 (Electrostatic Precipitator)

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation: DNR Construction Permit 95-A-154-P6

PM: 0.45 lb/ton glass pulled (NSPS Subpart CC/Consent Decree)

31.2 lb/hr

0.1 gr/dscf (567 IAC 23.3(2)"a")

PM10: 150 lb/hr

II. Monitoring Approach

A. Indicators and Ranges

Hourly secondary voltage and current to the ESP will be monitored to ensure the ESP is operating properly. The Secondary Voltage shall be maintained at or above 28kV and the Secondary Current shall be maintained at or above 185 milliamps. An excursion is defined as when one of the daily average indicator parameters is below the indicator minimum.

Indicator values are not applicable during Melting Furnace Startup, Control Device Startup, Maintenance, Malfunction, or abnormally low production rate days.

B. Measurement Approach, Data Collection, Record Keeping

Guardian records the voltage and current hourly when the ESP is operating to ensure they are above the specified minimum values. Parameter reading records are maintained for five years.

C. Performance Criteria and Reporting

Voltage or current readings below the specified minimum values would indicate a possible decrease in the performance of the ESP and potentially indicate an increase of particulate matter emissions.

Guardian will immediately investigate the reason for the excursion. Corrective action to return the voltage or secondary current to the normal range will be initiated as soon as possible but no later than 8 hours from the excursion.

Excursions or other monitoring deviations (operating conditions, emission limits, or reporting requirements) will be reported in the DNR Semi-Annual Monitoring and Annual Compliance Certification reports.

Emission Point ID Number: C001

Associated Equipment

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
CRS1	Cullet Return System	CE CRDC1: Baghouse	Glass	750 tons/day	99-A-299-P

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): 0%

Authority for Requirement: DNR Construction Permit 99-A-299-P

567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 1.43 lb/hr.

Authority for Requirement: DNR Construction Permit 99-A-299-P

Pollutant: Particulate Matter

Emission Limit(s): 1.43 lb/hr., 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 99-A-299-P

567 IAC 23.3(2)"a"

Operational Limits & Requirements

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

Control equipment parameters:

- 1. The baghouse shall be operated and maintained according to manufacturer's instructions.
- 2. Perform monthly operational status inspections of process and control equipment that is important to the performance of the capture and control system, and promptly remediate any deficiencies noted.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- 1. The source shall be physically labeled after the issuance of this permit with its name and source number as identified in this permit.
- 2. A record of all inspections and maintenance performed on the source.

Authority for Requirement: DNR Construction Permit 99-A-299-P

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 20 Stack Opening, (inches, dia.): 24 Exhaust Flow Rate (acfm): 14,065 Exhaust Temperature (°F): Ambient Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 99-A-299-P

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 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.

Opacity:

Visible emissions shall be observed on a weekly basis to ensure there are none when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from observation of the violation.

If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required? Authority for Requirement: 567 IAC 22 108(3)	Yes 🛛 No 🗌

CAM Plan for C001 Baghouse

I. Background

A. Emission Unit

Description: Cullet Return System Identification: Emission Unit: CRS1

Control Equipment: CRDC1 (Baghouse, reverse jet fabric filter)

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation: DNR Construction Permit 99-A-299-P

PM: 1.43 lb/hr (BACT)

0.1 gr/dscf (567 IAC 23.3(2)"a")

PM10: 1.43 lb/hr (BACT)

II. Monitoring Approach

A. Indicators and Ranges

Daily pressure drop checks to ensure the operating range is with 3-5 inches (inclusive) of water when operating.

Minimum value is not applicable during periods of time in which the cullet return system is not operating.

B. Measurement Approach, Data Collection, Record Keeping

Guardian checks the pressure drop daily when the cullet return system is operating to ensure it is within the specified operating range. Daily pressure drop reading records are maintained for five years.

Calibration of the pressure drop gauge is completed as specified in the manufacturer's recommendations and/or written facility specific O&M Plan.

C. Performance Criteria and Reporting

Pressure drop readings outside the specified range would indicate a possible decrease in the performance of the baghouse and potentially indicate an increase of particulate matter emissions.

Guardian will immediately investigate the reason for the excursion. Corrective action to return the pressure drop to the normal range will be initiated as soon as possible but no later than 8 hours from the excursion.

Excursions or other monitoring deviations (operating conditions, emission limits, or reporting requirements) will be reported in the DNR Semi-Annual Monitoring and Annual Compliance Certification reports.

Emission Point ID Number: SSS1

Associated Equipment

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
SSS1	Sorbent Storage Silo	CE SSS1: Bin Vent Filter	Sorbent Material	60,000 scf/hr.	16-A-061-S1

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-061-S1

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.20 lb/hr., 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 16-A-061-S1

567 IAC 23.3(2)"a"

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.

- 1. The owner or operator shall operate and maintain the control equipment according to the manufacturer's specifications.
- 2. The owner or operator shall record any maintenance work performed on the control equipment.

Authority for Requirement: DNR Construction Permit 16-A-061-S1

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

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 82.2

Stack Opening, (inches, dia.): 14 Exhaust Flow Rate (scfm): 1,000 Exhaust Temperature (°F): Ambient Discharge Style: Vertical Obstructed

Authority for Requirement: DNR Construction Permit 16-A-061-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🛛 No 🗌
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: DDS1 & DDS1b

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
DDS1	DDS1	ESP Dust Day Silo Stack 1	CE DDS1: Bin Vent Filter	ESP Dust	15,000 scf/hr.	16-A-059-S1
DDS1b		ESP Dust Day Silo Stack 1b	CE DDS1b: Bin Vent Filter			17-A-617

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permits 16-A-059-S1 & 17-A-617

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 lb/hr.⁽²⁾, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permits 16-A-059-S1 & 17-A-617

567 IAC 23.3(2)"a"

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.

- 1. The owner or operator shall operate and maintain the control equipment according to the manufacturer's specifications.
- 2. The owner or operator shall record and maintenance work performed on the control equipment.

Authority for Requirement: DNR Construction Permits 16-A-059-S1 & 17-A-617

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

⁽²⁾ Combined limit for EP DDS1 and EP DDS1b.

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 35.3

Stack Opening, (inches, dia.): 13 Exhaust Flow Rate (scfm): 250⁽³⁾ Exhaust Temperature (°F): Ambient Discharge Style: Vertical Obstructed

Authority for Requirement: DNR Construction Permits 16-A-059-S1 & 17-A-617

(3) Combined exhaust flowrate for DDS1 and DDS1b

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 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? (Required for CE DDS1 and CE DDS1b)	Yes 🗵 No 🗌
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: DH01

Associated Equipment

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
DH01	ESP Dust Hopper & Bag Unloading Station	CE DH01: Baghouse	ESP Dust	78,000 scf/hr.	16-A-060

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-060

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.2 lb/hr., 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 16-A-060

567 IAC 23.3(2)"a"

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.

1. Operate and maintain the control equipment according to the manufacturer's specifications.

34

2. Record any maintenance work performed on the control equipment.

Authority for Requirement: DNR Construction Permit 16-A-060

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

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): NA

Stack Opening, (inches, dia.): NA Exhaust Flow Rate (scfm): 1,300 Exhaust Temperature (°F): 70 Discharge Style: Vent Inside

Authority for Requirement: DNR Construction Permit 16-A-060

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 30 days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🛛 No 🗌
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: E001 & E002

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
E001	DEG01	Emergency Backup Generator #1	Diesel Fuel	2,347 bhp	99-A-300-P2
E002	DEG02	Emergency Backup Generator #2	Diesel Fuel	2,347 bhp	99-A-301-P2

Applicable Requirements

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

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

Pollutant: Opacity Emission Limit(s): 20%

Authority for Requirement: DNR Construction Permits 99-A-300-P2 & 99-A-301-P2

Pollutant: PM₁₀

Emission Limit(s): 2.82 lb/hr.

Authority for Requirement: DNR Construction Permits 99-A-300-P2 & 99-A-301-P2

Pollutant: Particulate Matter Emission Limit(s): 2.82 lb/hr.

Authority for Requirement: DNR Construction Permits 99-A-300-P2 & 99-A-301-P2

Pollutant: Nitrogen Oxides (NO_x) Emission Limit(s): 56.4 lb/hr.

Authority for Requirement: DNR Construction Permits 99-A-300-P2 & 99-A-301-P2

Operational Limits & Requirements

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

Hours of operation:

1. The diesel generators (permits #99-A-300-P2 and 99-A-301-P2) shall be operated no more than 1,460 hours total per twelve month rolling period.

Process throughput:

- 1. The fuel oil used at these sources shall be limited to a maximum sulfur content of 0.05% by weight.
- 2. The diesel generators shall be operated with 4 degrees of retarded timing.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- 1. Each source shall be physically labeled after constructed with its name and source number as identified in this permit.
- 2. The owner or operator shall record the date and hours of operation of each unit. The twelve month rolling total hours of operation for the generators (permits 99-A-300-P2 and 99-A-301-P2) shall be updated on a monthly basis.
- 3. The owner or operator shall keep a record of the sulfur content of the fuel oil combusted at each source, either through using an ASTM approved method to test each time the fuel oil tank is refilled, or through fuel oil vendor certification.

Authority for Requirement: DNR Construction Permits 99-A-300-P2 & 99-A-301-P2

NESHAP:

These emergency engines are subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(iii) these compression ignition emergency engines, located at an area source, are existing stationary RICE as they were constructed prior to June 12, 2006.

Compliance Date

Per 63.6595(a)(1) you must comply with the provisions of Subpart ZZZZ that are applicable by May 3, 2013.

Operation and Maintenance Requirements 40 CFR 63.6603, 63.6625, 63.6640 and Tables 2d and 6 to Subpart ZZZZ

- 1. Change oil and filter every 500 hours of operation or annually, whichever comes first. (See 63.6625(i) for the oil analysis option to extend time frame of requirements.)
- 2. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary.
- 3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- 4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- 5. Install a non-resettable hour meter if one is not already installed.
- 6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

Operating Limits 40 CFR 63.6640(f)

- 1. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
- 2. There is no time limit on the use of emergency stationary RICE in emergency situations.

- 3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
- 4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing. Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Recordkeeping Requirements 40 CFR 63.6655

- 1. Keep records of the maintenance conducted on the stationary RICE.
- 2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

Notification and Reporting Requirements 40 CFR 63.6645, 63.6650 and Table 2d to Subpart ZZZZ

- 1. An initial notification is not required per 40 CFR 63.6645(a)(5)
- 2. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2d. (See Footnote 2 of Table 2d for more information.)

Authority for Requirement: 40 CFR 63 Subpart ZZZZ

567 IAC 23.1(4)"cz"

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 62

Stack Opening, (inches, dia.): 16 Exhaust Flow Rate (scfm): 5,430 Exhaust Temperature (°F): 940

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 99-A-300-P2 & 99-A-301-P2

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 30 days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

<u>Monitoring Requirements</u> 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 🖂

Emission Point ID Number: E003

Associated Equipment

Emission	Emission Unit	Raw	Rated	Construction
Unit	Description	Material	Capacity	Permit
EMWS	Emergency Water Pump	Diesel Fuel	130 bhp	NA

Applicable Requirements

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

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

Pollutant: Opacity Emission Limit(s): 40%

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

Pollutant: Particulate Matter Emission Limit(s): 0.1 gr/dscf

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

Operational Limits & Requirements

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

Process throughput:

1. No person shall allow, cause or permit the combustion of number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 22.108(3)

NESHAP:

This emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(iii) this compression ignition emergency engine, located at an area source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

Compliance Date

Per 63.6595(a)(1) you must comply with the provisions of Subpart ZZZZ that are applicable by May 3, 2013.

Operation and Maintenance Requirements 40 CFR 63.6603, 63.6625, 63.6640 and Tables 2d and 6 to Subpart ZZZZ

- 1. Change oil and filter every 500 hours of operation or annually, whichever comes first. (See 63.6625(i) for the oil analysis option to extend time frame of requirements.)
- 2. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary.
- 3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- 4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- 5. Install a non-resettable hour meter if one is not already installed.
- 6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

Operating Limits 40 CFR 63.6640(f)

- 1. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
- 2. There is no time limit on the use of emergency stationary RICE in emergency situations.
- 3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
- 4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing. Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Recordkeeping Requirements 40 CFR 63.6655

- 1. Keep records of the maintenance conducted on the stationary RICE.
- 2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

Notification and Reporting Requirements 40 CFR 63.6645, 63.6650 and Table 2d to Subpart ZZZZ

1. An initial notification is not required per 40 CFR 63.6645(a)(5)

2. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2d. (See Footnote 2 of Table 2d for more information.)

Authority for Requirement: 40 CFR 63 Subpart ZZZZ 567 IAC 23.1(4)"cz"

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes □ No □

Facility Maintained Operation & Maintenance Plan Required? Yes □ No □

Compliance Assurance Monitoring (CAM) Plan Required? Yes □ No □

Emission Point ID Number: BLDG1

Associated Equipment

Emission	Emission Unit	Raw	Rated	Construction
Unit	Description	Material	Capacity	Permit
MS01	Cutting Fluid Application	Cutting Fluid	750 tons/day	NA

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.

There are no applicable requirements for this emission point at this time.

Monitoring Requirements

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

\times
\boxtimes
\boxtimes

Emission Point ID Number: DEGFS

Associated Equipment

Emission	Emission Unit	Raw	Rated	Construction
Unit	Description	Material	Capacity	Permit
DEGFS	Diesel Fuel Storage Tank	Diesel Fuel	5,000 gallons	99-A-302

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.

There are no applicable requirements for this emission point at this time.

Operational Limits & Requirements

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

Process throughput:

1. This tank shall be used only to store diesel oil.

Authority for Requirement: DNR Construction Permit 99-A-302

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The owner/operator shall keep records of anything stored in this tank

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): NA

Stack Opening, (inches, dia.): NA Exhaust Flow Rate (scfm): NA Exhaust Temperature (°F): Ambient

Discharge Style: NA

Authority for Requirement: DNR Construction Permit 99-A-302

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 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 🖂

Emission Point ID Number: CT01

Associated Equipment

Emission	Emission Unit	Raw	Rated	Construction
Unit	Description	Material	Capacity	Permit
CT01	Hot End Cooling Tower	Process Water	373,500 gallons/hr.	15-A-509

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 15-A-509

567 IAC 23.3(2)"d"

Pollutant: PM_{2.5}

Emission Limit(s): 0.94 lb/hr.

Authority for Requirement: DNR Construction Permit 15-A-509

Pollutant: PM₁₀

Emission Limit(s): 0.94 lb/hr.

Authority for Requirement: DNR Construction Permit 15-A-509

Pollutant: Particulate Matter

Emission Limit(s): 0.94 lb/hr., 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 15-A-509

567 IAC 23.3(2)"a"

Operational Limits & Requirements

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

Process throughput:

- 1. The circulating water in the cooling tower shall not exceed 6,000 parts per million (ppm) total dissolved solids (TDS) (monthly average).
- 2. Monitoring of the TDS shall be conducted on a calendar month basis. At least one sample shall be collected per month.
- 3. The cooling tower and drift eliminator shall be operated and maintained per the

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

- manufacturer's specifications and instructions.
- 4. Biocide or additive used in cooling water shall not contain any VOCs or HAPs.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- 1. Maintain records on-site of the monthly average TDS concentration in the cooling tower circulating water. Records shall also be kept of the dates of measurement and the methods used to determine the concentration of the TDS in the cooling water.
- 2. Maintain records of all maintenance and repair to the cooling tower and drift eliminator.
- 3. Maintain MSDS for all water treatment chemicals used in the cooling tower.

Authority for Requirement: DNR Construction Permit 15-A-509

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 16.44

Stack Opening, (inches, dia.): 84 Exhaust Flow Rate (scfm): 315,135 Exhaust Temperature (°F): 95

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 15-A-509

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 30 days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂
Authority for Requirement: 567 IAC 22.108(3)	

Emission Point ID Number: MBLFS1

Associated Equipment

Emission	Emission Unit	Raw	Rated	Construction
Unit	Description	Material	Capacity	Permit
MBLFS1	Mobile Gasoline Storage Tank	Gasoline	150 gallons	NA

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.

There are no applicable emission limits for this emission unit at this time.

Operational Limits & Requirements

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

NESHAP:

The tank is subject to 40 CFR 63 Subpart CCCCCC - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities. According to 40 CFR 63.11112(d) this storage tank, located at an area source, is an existing storage tank as it was constructed prior to November 9, 2006.

§63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.

- (a) You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
 - (1) Minimize gasoline spills;
 - (2) Clean up spills as expeditiously as practicable;
 - (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
 - (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
- (b) You are not required to submit notifications or reports as specified in §63.11125, §63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.
- (c) You must comply with the requirements of this subpart by the applicable dates specified in §63.11113.
- (d) Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

Authority for Requirement: 46 CFR 63 Subpart CCCCCC

567 IAC 23.1(4)"ec"

Monitoring Requirements The owner/operator of this equipment shall comply with the monitoring requirements.	quirements listed below.
Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂

Authority for Requirement: 567 IAC 22.108(3)

Compliance Assurance Monitoring (CAM) Plan Required?

Yes 🗌 No 🖂

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

- 1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. 567 IAC 22.108(9)"a"
- 2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. 567 IAC 22.105 (2)"h"(3)
- 3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. 567 IAC 22.108 (1)"b"
- 4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. 567 IAC 22.108 (14)
- 5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. 567 IAC 22.108 (9)"b"
- 6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. 567 IAC 22.108(15)"c"

G2. Permit Expiration

- 1. Except as provided in rule 567—22.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—22.105(455B). 567 IAC 22.116(2)
- 2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department to the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, Wallace State Office Building, 502 E 9th St., Des Moines, IA 50319-0034, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to U.S. EPA Region VII, Attention: Chief of Air Permitting & Standards Branch, 11201 Renner Blvd., Lenexa, KS 66219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). 567 IAC 22.105

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. 567 IAC 22.107 (4)

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108 (15)"e"

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 22.108 (5)

G6. Annual Fee

- 1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
- 2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
- 3. The emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
- 4. The fee shall be submitted annually by July 1 with forms specified by the department.
- 5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
- 6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
- 7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
- 8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

- 1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- 3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- 4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. 567 IAC 22.108 (15)"b"

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. 567 IAC 22.108 (9)"e"

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

- 1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
- 2. Remedy any cause of excess emissions in an expeditious manner.
- 3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
- 4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. 567 IAC 24.2(1)

G10. Recordkeeping Requirements for Compliance Monitoring

- 1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
 - a. The date, place and time of sampling or measurements
 - b. The date the analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses; and
 - f. The operating conditions as existing at the time of sampling or measurement.
 - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
- 2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

- 3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
 - a. Comply with all terms and conditions of this permit specific to each alternative scenario.
 - b. Maintain a log at the permitted facility of the scenario under which it is operating.
 - c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. 567 IAC 22.108(4), 567 IAC 22.108(12)

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
- b. Compliance test methods specified in 567 Chapter 25; or
- c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
- 2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a. Any monitoring or testing methods provided in these rules; or
 - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. 567 IAC 21.5(1)-567 IAC 21.5(2)

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 22.108(6)

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). 567 IAC Chapter 131-State Only

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a

violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

- a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:
 - i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
 - ii. The estimated quantity of the excess emission.
 - iii. The time and expected duration of the excess emission.
 - iv. The cause of the excess emission.
 - v. The steps being taken to remedy the excess emission.
 - vi. The steps being taken to limit the excess emission in the interim period.
- b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:
 - i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
 - ii. The estimated quantity of the excess emission.
 - iii. The time and duration of the excess emission.
 - iv. The cause of the excess emission.

- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 24.1(1)-567 IAC 24.1(4)
- 3. Emergency Defense for Excess Emissions. For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:
 - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The facility at the time was being properly operated;
 - c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
 - d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. 567 IAC 22.108(16)

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). 567 IAC 22.108(5)"b"

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. 567 IAC 23.1(2), 567 IAC 23.1(4)

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

- 1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
 - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
 - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
 - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
 - d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 22.144(455B));
 - e. The changes comply with all applicable requirements.
 - f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
 - vii. Any permit term or condition no longer applicable as a result of the change. 567 IAC 22.110(1)
- 2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. 567 IAC 22.110(2)
- 3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). 567 IAC 22.110(3)
- 4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. 567 IAC 22.110(4)

56

5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. 567 IAC 22.108(11)

G18. Duty to Modify a Title V Permit

- 1. Administrative Amendment.
 - a. An administrative permit amendment is a permit revision that does any of the following:
 - i. Correct typographical errors
 - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - iii. Require more frequent monitoring or reporting by the permittee; or iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
 - b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
 - c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.
- 2. Minor Title V Permit Modification.
 - a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
 - i. Do not violate any applicable requirement;
 - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
 - iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
 - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
 - v. Are not modifications under any provision of Title I of the Act; and vi. Are not required to be processed as significant modification under rule 567 22.113(455B).
 - b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

57

i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

- ii. The permittee's suggested draft permit;
- iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).
- c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. 567 IAC 22.111-567 IAC 22.113

G19. Duty to Obtain Construction Permits

Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. 567 IAC 22.1(1)

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (567 IAC 23.1(3)"a"); training fires and controlled burning of a demolished building (567 IAC 23.2).

G21. Open Burning

The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. 567 IAC 23.2 except 23.2(3)"j"; 567 IAC 23.2(3)"j" - State Only

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7)

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

- 1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
 - b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
 - c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
 - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
- 2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
- 3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle

has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. 40 CFR part 82

G24. Permit Reopenings

- 1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. 567 IAC 22.108(9)"c"
- 2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
 - a. Reopening and revision on this ground is <u>not</u> required if the permit has a remaining term of less than three years;
 - b. Reopening and revision on this ground is <u>not</u> 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 <u>not</u> required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. 567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"
- 3. A permit shall be reopened and revised under any of the following circumstances:
 - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination; b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
 - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement. d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

- e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. 567 IAC 22.114(1)
- 4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. 567 IAC 22.114(2)
- 5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. 567 IAC 22.114(3)

G25. Permit Shield

- 1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
 - a. Such applicable requirements are included and are specifically identified in the permit; or
 - b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
- 2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
- 3. A permit shield shall not alter or affect the following:
 - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act:
 - d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. 567 IAC 22.108 (18)

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. 567 IAC 22.108 (8)

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. 567 IAC 22.108 (9)"d"

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of 567 IAC 22.111(1). 567 IAC 22.111 (1)"d"

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. 567 IAC 22.3(3)"c"

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator Iowa DNR, Air Quality Bureau Wallace State Office Building 502 E 9th St. Des Moines, IA 50319-0034 (515) 725-9545

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program. 567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. 567 IAC 26.1(1)

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Iowa Compliance Officer

Air Branch

Enforcement and Compliance Assurance Division

U.S. EPA Region 7

11201 Renner Blvd.

Lenexa, KS 66219

(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau

Iowa Department of Natural Resources

Wallace State Office Building

502 E 9th St.

Des Moines, IA 50319-0034

(515) 725-8200

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1

1101 Commercial Court, Suite 10 Manchester, IA 52057 (563) 927-2640

Field Office 3

1900 N. Grand Ave. Spencer, IA 51301 (712) 262-4177

Field Office 5

Wallace State Office Building 502 E 9th St. Des Moines, IA 50319-0034 (515) 725-0268

Polk County Public Works Dept.

Air Quality Division 5885 NE 14th St. Des Moines, IA 50313 (515) 286-3351

Field Office 2

2300-15th St., SW Mason City, IA 50401 (641) 424-4073

Field Office 4

1401 Sunnyside Lane Atlantic, IA 50022 (712) 243-1934

Field Office 6

1023 West Madison Street Washington, IA 52353-1623 (319) 653-2135

Linn County Public Health

Air Quality Branch 1020 6th Street SE Cedar Rapids, IA 52401 (319) 892-6000