

**Iowa Department of Natural Resources
Title V Operating Permit**

Name of Permitted Facility: Ajinomoto Health and Nutrition North America, Inc - AFI

Facility Location: 1 Ajinomoto Dr, Eddyville, IA 52553

Air Quality Operating Permit Number: 23-TV-001

Expiration Date: 03/01/2028

Permit Renewal Application Deadline: 09/01/2023

EIQ Number: 92-0117

Facility File Number: 68-09-003

Responsible Official

Name: Heather Hoskins

Title: AFI General Manager

Mailing Address: 1 Ajinomoto Dr, Eddyville, IA 52553

Phone #: 641-351-7072

Permit Contact Person for the Facility

Name: David Sample

Title: SER Associate Manager

Mailing Address: 1 Ajinomoto Dr, Eddyville, IA 52553

Phone #: 641-969-3177

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. Two separate Title V permits are issued for the Ajinomoto Health and Nutrition North America, Inc. facilities in Eddyville, IA. This Title V permit is for the AFI portion of the facility.

For the Director of the Department of Natural Resources

Marnie Stein

3/02/2023

Marnie Stein, Supervisor of Air Operating Permits Section

Date

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Abbreviations

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

Pollutants

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

I. Facility Description and Equipment List

Facility Name: Ajinomoto Health and Nutrition North America, Inc - AFI
 Permit Number: 23-TV-XXX

Facility Description: Industrial Organic Chemicals Manufacturing (SIC 2869)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
EP-1	TF 7110A	AFI-HCL Storage Tank A	92-A-033-S1
	TF 7110B	AFI-HCL Storage Tank B	
EP-4	VS-2310-A	AFI-Seed Fermenter A	92-A-036-S3
EP-5	VS-2310-B	AFI-Seed Fermenter B	92-A-663-S2
EP-6	VM-2410-A	AFI-Main Fermenter A	92-A-037-S4
EP-7	VM-2410-B	AFI-Main Fermenter B	92-A-644-S4
EP-9	TF-7210	AFI-Sodium Carbonate Slurry Tank	92-A-041-S3
EP-10	TS-5360	AFI-Activated Carbon Tank	92-A-039-S2
	TF-5160	AFI-Product Re-Slurry/Pre-Coat Tank	
EP-11	NC-5610-A	AFI-MSG Counterbex Separator	92-A-040-S5
	DF-5620-A	AFI-Dryer A	
	DF-5624-A	AFI-Cooler A	
	JC-5628-A	AFI-MC A Separator	
	JC-5640-A	AFI-FC A Separator	
	MV-5611-A	AFI-#1 MSG Vibrating Conveyer A	
	TC-5760-A	AFI-EFC Hopper	
	MB-5630-A	AFI-Bucket Elevator A	
	MB-6134	AFI-PK FC Bucket Elevator	
EP-12	ML-6103	AFI-MSG EFC Paper Bag Packaging	00-A-170-S3
	WD-6270	AFI-MSG Fiber Drum Packaging	
	WD-6220	AFI-MSG Container Bag Packaging	
	MF-6250	AFI-MSG Paper Bag Packaging	
	WE-6280	AFI-MSG Retail Packaging	
EP-13	TK-7220	AFI-Soda Ash Silo	00-A-171-S2
EP-18	WE-6312	AFI-Blending Large Ribbon Mixer	01-A-1052-S2
	WE-6314	AFI-Blending Small Ribbon Mixer	
EP-19	VS-2310-C	AFI-Seed Fermenter C	07-A-1066-S3
EP-20	VM-2410-C	AFI-Main Fermenter C	07-A-1067-S2

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
EP-21	NC-5610-B	AFI-MSG Counterbex B Separator	07-A-1068-S2
	DF-5620-B	AFI-Dryer B	
	DF-5624-B	AFI-Cooler B	
	JC-5640-B	AFI-FC B Separator	
	JC-5628-B	AFI-MC B Separator	
	MV-5611-B	AFI-#1 MSG Vibrating Conveyor B	
	MB-5670-B	AFI-Bucket Elevator B	
EP-22	KT-9020-A	AFI-Cooling Tower Cell A	07-A-1069-S1
	KT-9020-B	AFI-Cooling Tower Cell B	
	KT-9020-C	AFI-Cooling Tower Cell C	
	KT-9020-D	AFI-Cooling Tower Cell D	
	KT-9020-E	AFI-Cooling Tower Cell E	
EP-23	KT-9020-2A	AFI-Cooling Tower Cell A	07-A-1070-S2
	KT-9020-2B	AFI-Cooling Tower Cell B	
	KT-9020-2C	AFI-Cooling Tower Cell C	
	KT-9020-2D	AFI-Cooling Tower Cell D	
EP-24	TC-5370	AFI-Activated Carbon Silo	11-A-555-S1
EP-25	PC-9011-A	Fire Water Diesel Pump	N/A
EP-26	DF-3300	AFI Fluidized Bed Dryer	21-A-013-S1
EP-27	B190476852	R&D Facility backup LP Generator	N/A

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
TC-2422-A	MFA Heavy Liquor Tank
LO-4230	CCR#2
TC-2422B	MFB Heavy Liquor Tank
LO-4240	CCR#3
TC-2422-C	MFC Heavy Liquor Tank
TO-4211	HL pH Adjust Tank
TC-4211-A	HLA Sterilization Tank
TC-4112-B	HLB Sterilization Tank
LO-4220	CCR#1
TF-7230	Soda Ash Mixing Tank
MO-5162	Pre-Coat Feeder
TF-5370	AC Mix Tank
TC-6180	EFC Service Tank
TC-4110	Zero Broth Receiving
TC-4000	E-Broth Tank
TC-4114-B	Broth Tank NH ₃
WE-6312	Blending Large Ribbon Mixer - Sanitizing
WE-6314	Blending Small Ribbon Mixer - Sanitizing
WA-3354	MPG Packaging
MB-3304	Vacuum Receiver Pump
TS-3400	Specialty Product Dissolving Tank
TS-5754-B	Specialty Product Dissolving Tank B
TS-5360-A	AFI-AC Slurry Stock Tank
TS-5160-A	AFI-Product Reslurry Tank

II. Plant-Wide Conditions

Facility Name: Ajinomoto Health and Nutrition North America, Inc. - AFI
Permit Number: 23-TV-001

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

Permit Duration

The term of this permit is: 5 Years
Commencing on: 03/02/2023
Ending on: 03/01/2028

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"

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

Particulate Matter:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed on or after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to be

used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.

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

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

III. Emission Point-Specific Conditions

Facility Name: Ajinomoto Health and Nutrition North America, Inc. - AFI
Permit Number: **23-TV-001**

Emission Point ID Number: EP 1

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): TF 7110A & TF 7110B
Emissions Control Equipment ID Number: OW - 7112
Emissions Control Equipment Description: HCL Vent Scrubber
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: TF 7110A & TF 7110B
Emission Unit Description: AFI-HCL Storage Tank A & AFI-HCL Storage Tank B
Raw Material/Fuel: 35% HCl
Rated Capacity: 30,000 lb/hr (per tank); 30,648 gal (per tank)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)“d”
DNR Construction Permit 92-A-033-S1

- ⁽¹⁾ An exceedance of the indicator opacity of 25% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.17 lb/hr

Authority for Requirement: DNR Construction Permit 92-A-033-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.17 lb/hr

Authority for Requirement: DNR Construction Permit 92-A-033-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf, 0.17 lb/hr
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 92-A-033-S1

Pollutant: Hydrochloric Acid (HCl)
Emission Limit(s): 0.17 lb/hr
Authority for Requirement: DNR Construction Permit 92-A-033-S1

Operational Limits & Requirements

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

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

- A. The owner or operator shall operate and maintain the Scrubber (CE OW-7112) according to the manufacturer specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Scrubber (CE OW-7112). This log shall include, but is not necessarily limited to:
 - a. The date and time any inspection and/or maintenance was performed on the Scrubber (CE OW-7112);
 - b. Any issues identified during the inspection and the date each issue was resolved;
 - c. Any issues identified during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 92-A-033-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): 8
- Stack Opening, (inches, dia.): 4
- Exhaust Flow Rate (scfm): Breathing and Working Loss
- Exhaust Temperature (°F): 68
- Discharge Style: Downwards
- Authority for Requirement: DNR Construction Permit 92-A-033-S1

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

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 4

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): VS-2310-A
Emissions Control Equipment ID Number: JC-2310-A
Emissions Control Equipment Description: Mist Eliminator
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: VS-2310-A
Emission Unit Description: AFI-Seed Fermenter A
Raw Material/Fuel: Antifoam, Process Seed Media, Glucose
Rated Capacity: 40,000 liters

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 92-A-036-S3

- ⁽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).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.03 lb/hr

Authority for Requirement: DNR Construction Permit 92-A-036-S3

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.03 lb/hr

Authority for Requirement: DNR Construction Permit 92-A-036-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf, 0.11 lb/hr

Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 92-A-036-S3

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.01 lb/hr

Authority for Requirement: DNR Construction Permit 92-A-036-S3

NSPS/NESHAP Applicability

This emission point is subject to 40 CFR 63 Subpart A *General Provisions and VVVVVV National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources*.

Authority for Requirement: DNR Construction Permit 92-A-036-S3
567 IAC 23.1(4)"ev"

Operational Limits & Requirements

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

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

- A. Prior to the use of any new input material in this process, the Safety Data Sheet (SDS) for the material shall be reviewed through the management of change (MOC) process for VOC and HAP constituents. If VOC or HAP are present, the owner or operator shall supply product information to the Department for review and approval. This data shall include, but is not limited to:
 - a. A description of the new input material;
 - b. A Safety Data Sheet (SDS) for the new input material; and
 - c. Calculations showing the potential VOC, single HAP, and total HAP emissions from this emission point (EP-4) with the new material.
- B. The owner or operator shall operate and maintain the Mist Eliminator (CE JC-2310-A) according to the manufacturer specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Mist Eliminator (CE JC-2310-A). This log shall include, but is not necessarily limited to:
 - a. The date and time any inspection and/or maintenance was performed on the Mist Eliminator (CE JC-2310-A);
 - b. Any issues identified during the inspection and the date each issue was resolved;
 - c. Any issues identified during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member performing the maintenance or inspection.
- C. The owner or operator shall meet all of the management practices specified in 40 CFR §63.11495(a) that apply to the AFI Seed Fermenter A (EU VS-2310-A).
- D. Per 40 CFR §63.11496(f), the owner or operator shall keep:
 - a. Safety Data Sheet (SDS) for any input material to any process covered under NESHAP Subpart VVVVVV;
 - b. For any process with metal HAP as an input, the owner or operator shall keep records of the number of batches completed per month and the estimated metal HAP emissions; and,
 - c. The total emissions must be reevaluated before any process or operational change is made that affects emissions of metal HAP. If projected emissions increase to

400 lb/yr or more, the owner operator must be in compliance with one of the options for metal HAP process vents listed in Table 4 of NESHAP Subpart VVVVVV upon initiating operation under the new operating conditions.

Authority for Requirement: DNR Construction Permit 92-A-036-S3
567 IAC 23.1(4)"ev"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 75

Stack Opening, (inches, dia.): 8

Exhaust Flow Rate (scfm): 880

Exhaust Temperature (°F): 95

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 92-A-036-S3

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

Monitoring Requirements

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 5

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): VS-2310-B
Emissions Control Equipment ID Number: JC-2310-B
Emissions Control Equipment Description: Mist Eliminator
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: VS-2310-B
Emission Unit Description: AFI-Seed Fermenter B
Raw Material/Fuel: Antifoam, Process Seed Media, Glucose
Rated Capacity: 40,000 liters

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 92-A-663-S2

- ⁽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).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.03 lb/hr

Authority for Requirement: DNR Construction Permit 92-A-663-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.03 lb/hr

Authority for Requirement: DNR Construction Permit 92-A-663-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf, 0.11 lb/hr

Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 92-A-663-S2

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.01 lb/hr

Authority for Requirement: DNR Construction Permit 92-A-663-S2

NSPS/NESHAP Applicability

This emission point is subject to 40 CFR 63 Subpart A *General Provisions and VVVVVV National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources*.

Authority for Requirement: DNR Construction Permit 92-A-663-S2
567 IAC 23.1(4)"ev"

Operational Limits & Requirements

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

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

- A. Prior to the use of any new input material in this process, the Safety Data Sheet (SDS) for the material shall be reviewed through the management of change (MOC) process for VOC and HAP constituents. If VOC or HAP are present, the owner or operator shall supply product information to the Department for review and approval. This data shall include, but is not limited to:
 - a. A description of the new input material;
 - b. A Safety Data Sheet (SDS) for the new input material; and
 - c. Calculations showing the potential VOC, single HAP, and total HAP emissions from this emission point (EP-5) with the new material.
- B. The owner or operator shall operate and maintain the Mist Eliminator (CE JC-2310-B) according to the manufacturer specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Mist Eliminator (CE JC-2310-B). This log shall include, but is not necessarily limited to:
 - a. The date and time any inspection and/or maintenance was performed on the Mist Eliminator (CE JC-2310-B);
 - b. Any issues identified during the inspection and the date each issue was resolved;
 - c. Any issues identified during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member performing the maintenance or inspection.
- C. The owner or operator shall meet all of the management practices specified in 40 CFR §63.11495(a) that apply to the AFI Seed Fermenter B (EU VS-2310-B).
- D. Per 40 CFR §63.11496(f), the owner or operator shall keep:
 - a. Safety Data Sheet (SDS) for any input material to any process covered under NESHAP Subpart VVVVVV;
 - b. For any process with metal HAP as an input, the owner or operator shall keep records of the number of batches completed per month and the estimated metal HAP emissions; and,
 - c. The total emissions must be reevaluated before any process or operational change is made that affects emissions of metal HAP. If projected emissions increase to

400 lb/yr or more, the owner operator must be in compliance with one of the options for metal HAP process vents listed in Table 4 of NESHAP Subpart VVVVVV upon initiating operation under the new operating conditions.

Authority for Requirement: DNR Construction Permit 92-A-663-S2
567 IAC 23.1(4)"ev"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 75

Stack Opening, (inches, dia.): 8

Exhaust Flow Rate (scfm): 880

Exhaust Temperature (°F): 95

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 92-A-663-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 6

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): VM-2410-A
Emissions Control Equipment ID Number: JC-2412-A, JC-2411-A, AS-2413-A
Emissions Control Equipment Description: Cyclone, Cyclone, Ammonia Scrubber
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: VM-2410-A
Emission Unit Description: AFI-Main Fermenter A
Raw Material/Fuel: Seed solution, Water, Ammonia, Nutrients
Rated Capacity: 230,000 liters

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)“d”

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.35 lbs/hr

Authority for Requirement: DNR Construction Permit 92-A-037-S4

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.68 lbs/hr

Authority for Requirement: DNR Construction Permit 92-A-037-S4

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf; 0.68 lbs/hr

Authority for Requirement: 567 IAC 23.3(2)“a”

DNR Construction Permit 92-A-037-S4

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.15 lb/hr

Authority for Requirement: DNR Construction Permit 92-A-037-S4

NSPS/NESHAP Applicability

This emission point is subject to 40 CFR 63 Subpart A *General Provisions* and VVVVVV *National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources*.

Authority for Requirement: DNR Construction Permit 92-A-037-S4
567 IAC 23.1(4)"ev"

Operational Limits & Requirements

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

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

- A. Prior to the use of any new input material in this process, the Safety Data Sheet (SDS) for the material shall be reviewed through the management of change (MOC) process for VOC and HAP constituents. If VOC or HAP are present, the owner or operator shall supply product information to the Department for review and approval. This data shall include, but is not limited to:
 - a. A description of the new input material;
 - b. A Safety Data Sheet (SDS) for the new input material; and
 - c. Calculations showing the potential VOC, single HAP, and total HAP emissions from this emission point (EP-6) with the new material.
- B. The owner or operator shall operate and maintain the Cyclone (CE JC-2411-A), Cyclone (CE JC-2412-A), and Ammonia Scrubber (CE AS-2413-A) according to the manufacturer specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Cyclone (CE JC-2411-A), Cyclone (CE JC-2412-A), and Ammonia Scrubber (CE AS-2413-A). This log shall include, but is not necessarily limited to:
 - a. The date and time any inspection and/or maintenance was performed on the Cyclone (CE JC-2411-A), Cyclone (CE JC-2412-A), and Ammonia Scrubber (CE AS-2413-A);
 - b. Any issues identified during the inspection and the date each issue was resolved;
 - c. Any issues identified during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member performing the maintenance or inspection.
- C. The owner or operator shall meet all of the management practices specified in 40 CFR §63.11495(a) that apply to the AFI Main Fermenter A (EU VM-2410-A).
- D. Per 40 CFR §63.11496(f), the owner or operator shall keep:
 - a. Safety Data Sheet (SDS) for any input material to any process covered under NESHAP Subpart VVVVVV;

- b. For any process with metal HAP as an input, the owner or operator shall keep records of the number of batches completed per month and the estimated metal HAP emissions; and,
 - c. The total emissions must be reevaluated before any process or operational change is made that affects emissions of metal HAP. If projected emissions increase to 400 lb/yr or more, the owner operator must be in compliance with one of the options for metal HAP process vents listed in Table 4 of NESHAP Subpart VVVVVV upon initiating operation under the new operating conditions.
- E. The facility shall run a continuous monitor on the Scrubber (CE AS-2413-A) to measure liquid flow through the scrubber, in gallons per minute, and a continuous monitor for pH. Utilizing the manufacturer specifications and stack test results on similar units, the facility shall determine and record appropriate ranges for the flow and pH that demonstrates that the scrubber is working properly within 60 days of installing the meters.
- a. The owner or operator shall collect continuous data from the liquid flow and pH monitors. On an hourly basis, the average liquid flow rate and pH of the scrubber liquid shall be calculated. An alarm will sound if the hourly average liquid flow rate or pH of the scrubber liquid is outside of the applicable range established for this source. This data shall be collected during normal operating conditions, which is when the fermenter contains any fermentation media.
 - b. On an hourly basis, the owner or operator shall calculate the 3-hour average scrubber liquid feed rate and the pH of the scrubber liquid. An alarm will sound if the 3-hour average liquid flow rate or pH of the scrubber liquid is outside of the applicable range established for this source. The owner or operator shall record the date and time of the occurrence, corrective actions taken, and time until the scrubber parameters are back in the applicable range. This data shall be collected during normal operating conditions, which is when the fermenter contains any fermentation media for at least 3 successive hours.

Authority for Requirement: DNR Construction Permit 92-A-037-S4
567 IAC 23.1(4)"ev"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): 87
- Stack Opening, (inches, dia.): 20
- Exhaust Flow Rate (scfm): 6,524
- Exhaust Temperature (°F): 93
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: DNR Construction Permit 92-A-037-S4

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

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 7

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): VM-2410-B
Emissions Control Equipment ID Number: JC-2412-B, JC-2411-B, AS-2413-B
Emissions Control Equipment Description: Cyclone, Cyclone, Ammonia Wet Scrubber
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: VM-2410-B
Emission Unit Description: AFI-Main Fermenter B
Raw Material/Fuel: Seed Solution, Water, Ammonia, Nutrients
Rated Capacity: 230,000 liters

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)“d”

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.35 lbs/hr

Authority for Requirement: DNR Construction Permit 92-A-664-S4

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.68 lbs/hr

Authority for Requirement: DNR Construction Permit 92-A-664-S4

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf; 0.68 lbs/hr

Authority for Requirement: 567 IAC 23.3(2)“a”

DNR Construction Permit 92-A-664-S4

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.15 lb/hr

Authority for Requirement: DNR Construction Permit 92-A-664-S4

NSPS/NESHAP Applicability

This emission point is subject to 40 CFR 63 Subpart A *General Provisions* and VVVVVV *National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources*.

Authority for Requirement: DNR Construction Permit 92-A-664-S4
567 IAC 23.1(4)"ev"

Operational Limits & Requirements

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

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

- A. Prior to the use of any new input material in this process, the Safety Data Sheet (SDS) for the material shall be reviewed through the management of change (MOC) process for VOC and HAP constituents. If VOC or HAP are present, the owner or operator shall supply product information to the Department for review and approval. This data shall include, but is not limited to:
 - a. A description of the new input material;
 - b. A Safety Data Sheet (SDS) for the new input material; and
 - c. Calculations showing the potential VOC, single HAP, and total HAP emissions from this emission point (EP-7) with the new material.
- B. The owner or operator shall operate and maintain the Cyclone (CE JC-2411-B), Cyclone (CE JC-2412-B), and Ammonia Scrubber (CE AS-2413-B) according to the manufacturer specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Cyclone (CE JC-2411-B), Cyclone (CE JC-2412-B), and Ammonia Scrubber (CE AS-2413-B). This log shall include, but is not necessarily limited to:
 - a. The date and time any inspection and/or maintenance was performed on the Cyclone (CE JC-2411-B), Cyclone (CE JC-2412-B), and Ammonia Scrubber (CE AS-2413-B);
 - b. Any issues identified during the inspection and the date each issue was resolved;
 - c. Any issues identified during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member performing the maintenance or inspection.
- C. The owner or operator shall meet all of the management practices specified in 40 CFR §63.11495(a) that apply to the AFI Main Fermenter B (EU VM-2410-B).
- D. Per 40 CFR §63.11496(f), the owner or operator shall keep:
 - a. Safety Data Sheet (SDS) for any input material to any process covered under NESHAP Subpart VVVVVV;

- b. For any process with metal HAP as an input, the owner or operator shall keep records of the number of batches completed per month and the estimated metal HAP emissions; and,
 - c. The total emissions must be reevaluated before any process or operational change is made that affects emissions of metal HAP. If projected emissions increase to 400 lb/yr or more, the owner operator must be in compliance with one of the options for metal HAP process vents listed in Table 4 of NESHAP Subpart VVVVVV upon initiating operation under the new operating conditions.
- E. The facility shall run a continuous monitor on the Scrubber (CE AS-2413-B) to measure liquid flow through the scrubber, in gallons per minute, and a continuous monitor for pH. Utilizing the manufacturer specifications and stack test results on similar units, the facility shall determine and record appropriate ranges for the flow and pH that demonstrates that the scrubber is working properly within 60 days of installing the meters.
- a. The owner or operator shall collect continuous data from the liquid flow and pH monitors. On an hourly basis, the average liquid flow rate and pH of the scrubber liquid shall be calculated. An alarm will sound if the hourly average liquid flow rate or pH of the scrubber liquid is outside of the applicable range established for this source. This data shall be collected during normal operating conditions, which is when the fermenter contains any fermentation media.
 - b. On an hourly basis, the owner or operator shall calculate the 3-hour average scrubber liquid feed rate and the pH of the scrubber liquid. An alarm will sound if the 3-hour average liquid flow rate or pH of the scrubber liquid is outside of the applicable range established for this source. The owner or operator shall record the date and time of the occurrence, corrective actions taken, and time until the scrubber parameters are back in the applicable range. This data shall be collected during normal operating conditions, which is when the fermenter contains any fermentation media for at least 3 successive hours.

Authority for Requirement: DNR Construction Permit 92-A-664-S4
567 IAC 23.1(4)"ev"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 87
Stack Opening, (inches, dia.): 20
Exhaust Flow Rate (scfm): 6,524
Exhaust Temperature (°F): 93
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 92-A-664-S4

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

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 9

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): TF-7210

Emissions Control Equipment ID Number: N/A

Emissions Control Equipment Description: N/A

Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: TF-7210

Emission Unit Description: AFI-Sodium Carbonate Slurry Tank

Raw Material/Fuel: Sodium Carbonate

Rated Capacity: 15.15 ton/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)“d”

DNR Construction Permit 92-A-041-S3

⁽¹⁾ An exceedance of the indicator opacity of 25% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.46 lb/hr

Authority for Requirement: DNR Construction Permit 92-A-041-S3

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.46 lb/hr

Authority for Requirement: DNR Construction Permit 92-A-041-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf, 0.51 lb/hr

Authority for Requirement: 567 IAC 23.3(2)“a”

DNR Construction Permit 92-A-041-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 75

Stack Opening, (inches, dia.): 8

Exhaust Flow Rate (scfm): Working and Breathing Losses

Exhaust Temperature (°F): 68

Discharge Style: obstructed

Authority for Requirement: DNR Construction Permit 92-A-041-S3

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 10

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): TS-5360 & TF-5160

Emissions Control Equipment ID Number: OB-5360-2

Emissions Control Equipment Description: Baghouse

Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: TS-5360 & TF-5160

Emission Unit Description: AFI-Activated Carbon Tank, AFI-Product Re-Slurry/Pre-Coat Tank

Raw Material/Fuel: Pre-coat, Water, Activated Carbon

Rated Capacity: 17,000 lb/hr; 6,000 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)“d”

⁽¹⁾An exceedance of the indicator opacity of 25% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.46 lbs/hr

Authority for Requirement: DNR Construction Permit 92-A-039-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.46 lbs/hr

Authority for Requirement: DNR Construction Permit 92-A-039-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf; 0.51 lbs/hr

Authority for Requirement: 567 IAC 23.3(2)“a”

DNR Construction Permit 92-A-039-S2

Operational Limits & Requirements

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

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

- A. The AFI – Activated Carbon Tank (EU TS-5360) shall vent directly to the Baghouse (CE OB-5360-2) during emergency situations when the tank is used to mix powdered activated carbon and water. The AFI – Activated Carbon Tank (EU TS-5360) is not required to vent to the Baghouse (CE OB-5360-2) during normal operating conditions, which is when the tank contains a slurry of activated carbon and water. During normal operating conditions, the working and breathing losses of the AFI – Activated Carbon Tank (EU TS-5360) will vent indoors.
- B. The AFI – Product Re-Slurry/Pre-Coat Tank (EU TF-5160) shall vent directly to the Baghouse (CE OB-5360-2) during upset conditions when the tank is used to mix precoat and water. The AFI – Product Re-Slurry/Pre-Coat Tank (EU TF-5160) is not required to vent to the Baghouse (CE OB-5360-2) during normal operating conditions, which is when the tank contains recovered product crystals and water. During normal operating conditions, the working and breathing losses of the AFI – Product Re-Slurry/Pre-Coat Tank (EU TF-5160) will vent indoors.
- C. The owner or operator shall operate and maintain the Baghouse (CE OB-5360-2) according to the manufacturer specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Baghouse (CE OB-5360-2). This log shall include, but is not necessarily limited to:
 - a. The date and time any inspection and/or maintenance was performed on the Baghouse (CE OB-5360-2);
 - b. Any issues identified during the inspection and the date each issue was resolved;
 - c. Any issues identified during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 92-A-039-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 75

Stack Opening, (inches, dia.): 6

Exhaust Flow Rate (scfm): 600

Exhaust Temperature (°F): 70

Discharge Style: Vertical Obstructed

Authority for Requirement: DNR Construction Permit 92-A-039-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 11

Associated Equipment

Emission Unit	Emission Unit ID	Maximum Rated Capacity	Control Equipment
AFI-MSG Counterbex Separator	NC-5610-A	27,000 lb/hr	Cyclone (CE JC-5612-A) and Baghouse (CE OB-5750)
AFI-Dryer A	DF-5620-A	12,400 lb/hr	Cyclone (CE JC-5622-A) and Baghouse (CE OB-5750)
AFI-Cooler A	DF-5624-A	12,000 lb/hr	Cyclone (CE JC-5622-A) and Baghouse (CE OB-5750)
AFI-FC-A Separator	JC-5640-A	4,800 lb/hr	Cyclone (CE JC-5757-A) and Baghouse (CE OB-5750)
AFI-MC A Separator	JC-5628-A	12,000 lb/hr	Cyclone (CE JC-6570-A) and Baghouse (CE OB-5750)
AFI-#1 MSG Vibrating Conveyor A	MV-5611-A	12,000 lb/hr	Baghouse (CE OB-5750)
AFI-EFC Hopper	TC-5760-A	720 lb/hr	Baghouse (CE OB-5750)
AFI-Bucket Elevator A	MB-5630-A	7,200 lb/hr	Baghouse (CE OB-5750)
AFI-PK FC Bucket Elevator	MB-6134	8,800 lb/hr	Baghouse (CE OB-5750)
AFI-RC/SRC Bucket Elevator	MB-6614	14,400 lb/hr	Baghouse (CE OB-5750)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)“d”

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 3.61 lbs/hr

Authority for Requirement: DNR Construction Permit 92-A-040-S5

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 3.61 lbs/hr

Authority for Requirement: DNR Construction Permit 92-A-040-S5

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 3.61 lbs/hr
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 92-A-040-S5

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 3.70 lb/hr
Authority for Requirement: DNR Construction Permit 92-A-040-S5

NSPS/NESHAP Applicability

This emission point is subject to 40 CFR 63 Subpart A *General Provisions and VVVVVV National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources.*

Authority for Requirement: DNR Construction Permit 92-A-040-S5
567 IAC 23.1(4)"ev"

Operational Limits & Requirements

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

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

- A. Prior to the use of any new input material in this process, the Safety Data Sheet (SDS) for the material shall be reviewed through the management of change (MOC) process for VOC and HAP constituents. If VOC or HAP are present, the owner or operator shall supply product information to the Department for review and approval. This data shall include, but is not limited to:
 - a. A description of the new input material;
 - b. A Safety Data Sheet (SDS) for the new input material; and
 - c. Calculations showing the potential VOC, single HAP, and total HAP emissions from this emission point (EP-11) with the new material.
- B. The owner or operator shall operate and maintain Cyclone (CE JC-5612-A), Cyclone (CE JC-5622-A), Cyclone (CE JC-5670-A), Cyclone (CE JC-5757-A), and Baghouse (CE OB-5750) according to the manufacturer specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on Cyclone (CE JC-5612-A), Cyclone (CE JC-5622-A), Cyclone (CE JC-5670-A), Cyclone (CE JC-5757-A), and Baghouse (CE OB-5750). This log shall include, but is not necessarily limited to:
 - a. The date and time any inspection and/or maintenance was performed on Cyclone (CE JC-5612-A), Cyclone (CE JC-5622-A), Cyclone (CE JC-5670-A), Cyclone (CE JC-5757-A), and Baghouse (CE OB-5750);
 - b. Any issues identified during the inspection and the date each issue was resolved;

- c. Any issues identified during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member performing the maintenance or inspection.
- C. The owner or operator shall maintain a differential pressure drop across the Baghouse (CE OB-5750) between 0.5 and 5.5 inches water column. The owner or operator shall:
 - a. Install a digital monitoring device to measure the pressure drop across the Baghouse (CE OB-5750) within 90 days of the issuance of this permit;
 - b. Calibrate, operate, and maintain the monitoring device according to the manufacturer's specifications;
 - c. Operate the device at all times that Dryer A (EU DF-5620-A) and Baghouse (CE OB-5750) are in operation;
 - d. Monitor and record the pressure drop across the Baghouse (CE OB-5750) drop continuously while the process is in operation;
 - e. Calculate the average pressure drop readings over a time period not to exceed one hour;
 - f. Program an alarm to sound if the hourly average pressure drop is outside of the applicable range; and
 - g. On an hourly basis, the owner or operator shall calculate the 3-hour average pressure drop across the Baghouse (CE OB-5750). If the 3-hour average pressure drop range is not between 0.5 and 5.5 inches water column an alarm will sound and the owner or operator shall record the date and time of the occurrence, corrective actions taken, and the time until the pressured drop parameters are back in the applicable range. This data shall be collected during normal operating conditions, which is when the dryer has operated for at least 3 successive hours.
- D. The owner or operator shall comply with the applicable standards in 40 CFR Part 63, Subparts A [§60.1 – §60.19] and VVVVVV [§63.11494 – §63.11503], including those not specifically mentioned in this permit.
- E. The owner or operator shall meet all of the management practices specified in 40 CFR §63.11495(a) that apply to the AFI-MSG Counterbex Separator (EU NC-5610-A), AFI-Dryer A (EU DF-5620-A), AFI-Cooler A (EU DF-5624-A), AFI-FC-A Separator (EU JC-5640-A), AFI-MC A Separator (EU JC-5628-A), AFI-#1 MSG Vibrating Conveyor A (EU MV-5611-A), AFI-EFC Hopper (EU TC-5670-A), AFI-Bucket Elevator A (EU MB-5630-A), AFI-PK FC Bucket Elevator (EU MB-6134), and AFI-RC/SRC Bucket Elevator (EU MB-6614).
- F. Per 40 CFR §63.11496(f), the owner or operator shall keep:
 - a. Safety Data Sheet (SDS) for any input material to any process covered under NESHAP Subpart VVVVVV;
 - b. For any process with metal HAP as an input, the owner or operator shall keep records of the number of batches completed per month and the estimated metal HAP emissions; and,
 - c. The total emissions must be reevaluated before any process or operational change is made that affects emissions of metal HAP. If projected emissions increase to 400 lb/yr or more, the owner operator must be in compliance with one of the options for metal HAP process vents listed in Table 4 of NESHAP Subpart VVVVVV upon initiating operation under the new operating conditions.

Authority for Requirement: DNR Construction Permit 92-A-040-S5
567 IAC 23.1(4)"ev"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 75
Stack Opening, (inches, dia.): 29.25
Exhaust Flow Rate (scfm): 21,000
Exhaust Temperature (°F): 120
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 92-A-040-S5

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 12

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): ML-6103, WD-6270, WD-6220, MF-6250, WE-6280
Emissions Control Equipment ID Number: OB-6225
Emissions Control Equipment Description: Baghouse
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit ID	Emission Unit Description	Maximum Rated Capacity
ML-6103	AFI-MSG EFC Paper Bag Packaging	21,000 lb/hr
WD-6270	AFI-MSG Fiber Drum Packaging	20,000 lb/hr
WD-6220	AFI-MSG Container Bag Packaging	15,000 lb/hr
MF-6250	AFI-MSG Paper Bag Packaging	11,653 lb/hr
WE-6280	AFI-MSG Retail Packaging	2,880 lb/hr

Raw Material/Fuel: MSG

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)“d”

⁽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).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.34 lb/hr

Authority for Requirement: DNR Construction Permit 00-A-170-S3

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.34 lb/hr

Authority for Requirement: DNR Construction Permit 00-A-170-S3

Pollutant: Particulate Matter (PM)

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

Authority for Requirement: 567 IAC 23.3(2)“a”

DNR Construction Permit 00-A-170-S3

Operational Limits & Requirements

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

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

- A. The owner or operator shall operate and maintain the Baghouse (CE OB-6225) according to the manufacturer specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Baghouse (CE OB-6225). This log shall include, but is not necessarily limited to:
 - a. The date and time any inspection and/or maintenance was performed on the Baghouse (CE OB-6225);
 - b. Any issues identified during the inspection and the date each issue was resolved;
 - c. Any issues identified during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 00-A-170-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 42

Stack Opening, (inches, dia.): 18

Exhaust Flow Rate (scfm): 5,500

Exhaust Temperature (°F): 70

Discharge Style: Vertical Obstructed

Authority for Requirement: DNR Construction Permit 00-A-170-S3

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 13

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): TK-7220
Emissions Control Equipment ID Number: OB-7221
Emissions Control Equipment Description: Baghouse
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: TK-7220
Emission Unit Description: AFI-Soda Ash Silo
Raw Material/Fuel: Caustic Soda Ash
Rated Capacity: 20 ton/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)“d”

⁽¹⁾An exceedance of the indicator opacity of 25% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 1.04 lb/hr

Authority for Requirement: DNR Construction Permit 00-A-171-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 2.2 lb/hr

Authority for Requirement: DNR Construction Permit 00-A-171-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf, 2.2 lb/hr

Authority for Requirement: 567 IAC 23.3(2)“a”

DNR Construction Permit 00-A-171-S2

Operational Limits & Requirements

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

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

- A. The owner or operator shall operate and maintain the Baghouse (CE OB-7221) according to the manufacturer specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Baghouse (CE OB-7221). This log shall include, but is not necessarily limited to:
 - a. The date and time any inspection and/or maintenance was performed on the Baghouse (CE OB-7221);
 - b. Any issues identified during the inspection and the date each issue was resolved;
 - c. Any issues identified during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 00-A-171-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 70

Stack Opening, (inches, dia.): 24 x 18

Exhaust Flow Rate (scfm): 2,600

Exhaust Temperature (°F): 68

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 00-A-171-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 18

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): WE-6312 & WE-6314
Emissions Control Equipment ID Number: OB-6306
Emissions Control Equipment Description: Baghouse
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: WE-6312 & WE-6314
Emission Unit Description: AFI-Blending Large Ribbon Mixer & AFI-Blending Small Ribbon Mixer
Raw Material/Fuel: Seasoning and Amino Acid
Rated Capacity: 3,000 lb/hr; 500 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)“d”

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.01 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-1052-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.27 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-1052-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf, 0.91 lb/hr

Authority for Requirement: 567 IAC 23.3(2)“a”

DNR Construction Permit 01-A-1052-S2

Operational Limits & Requirements

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

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

- A. The owner or operator shall operate and maintain the Baghouse (CE OB-6306) according to the manufacturer specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Baghouse (CE OB-6306). This log shall include, but is not necessarily limited to:
 - a. The date and time any inspection and/or maintenance was performed on the Baghouse (CE OB-6306);
 - b. Any issues identified during the inspection and the date each issue was resolved;
 - c. Any issues identified during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 01-A-1052-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 11

Stack Opening, (inches, dia.): 8

Exhaust Flow Rate (scfm): 1,056

Exhaust Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 01-A-1052-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 19

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): VS-2310-C
Emissions Control Equipment ID Number: JC-2310-C
Emissions Control Equipment Description: Mist Eliminator
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: VS-2310-C
Emission Unit Description: AFI-Seed Fermenter C
Raw Material/Fuel: Antifoam, Process Seed Media, Glucose
Rated Capacity: 40,000 liters

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)“d”

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.03 lb/hr

Authority for Requirement: DNR Construction Permit 07-A-1066-S3

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.23 lb/hr

Authority for Requirement: DNR Construction Permit 07-A-1066-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf, 0.23 lb/hr

Authority for Requirement: 567 IAC 23.3(2)“a”
DNR Construction Permit 07-A-1066-S3

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.23

Authority for Requirement: DNR Construction Permit 07-A-1066-S3

NSPS/NESHAP Applicability

This emission point is subject to 40 CFR 63 Subpart A *General Provisions and VVVVVV National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources.*

Authority for Requirement: DNR Construction Permit 07-A-1066-S3
567 IAC 23.1(4)"ev"

Operational Limits & Requirements

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

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

- A. Prior to the use of any new input material in this process, the Safety Data Sheet (SDS) for the material shall be reviewed through the management of change (MOC) process for VOC and HAP constituents. If VOC or HAP are present, the owner or operator shall supply product information to the Department for review and approval. This data shall include, but is not limited to:
 - a. A description of the new input material;
 - b. A Safety Data Sheet (SDS) for the new input material; and
 - c. Calculations showing the potential VOC, single HAP, and total HAP emissions from this emission point (EP-19) with the new material.
- B. The owner or operator shall operate and maintain the Mist Eliminator (CE JC-2310-C) according to the manufacturer specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Mist Eliminator (CE JC-2310-C). This log shall include, but is not necessarily limited to:
 - a. The date and time any inspection and/or maintenance was performed on the Mist Eliminator (CE JC-2310-C);
 - b. Any issues identified during the inspection and the date each issue was resolved;
 - c. Any issues identified during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member performing the maintenance or inspection.
- C. The owner or operator shall meet all of the management practices specified in 40 CFR §63.11495(a) that apply to the AFI Seed Fermenter C (EU VS-2310-C).
- D. Per 40 CFR §63.11496(f), the owner or operator shall keep:
 - a. Safety Data Sheet (SDS) for any input material to any process covered under NESHAP Subpart VVVVVV;
 - b. For any process with metal HAP as an input, the owner or operator shall keep records of the number of batches completed per month and the estimated metal HAP emissions; and,
 - c. The total emissions must be reevaluated before any process or operational change is made that affects emissions of metal HAP. If projected emissions increase to

400 lb/yr or more, the owner operator must be in compliance with one of the options for metal HAP process vents listed in Table 4 of NESHAP Subpart VVVVVV upon initiating operation under the new operating conditions.

Authority for Requirement: DNR Construction Permit 07-A-1066-S3
567 IAC 23.1(4)"ev"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 65
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 1,100
Exhaust Temperature (°F): 95
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 07-A-1066-S3

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 20

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): VM-2410-C
Emissions Control Equipment ID Number: JC-2411-C, JC-2412-C & AS-2413-C
Emissions Control Equipment Description: Cyclone, Cyclone, Ammonia Scrubber
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: VM-2410-C
Emission Unit Description: AFI-Main Fermenter C
Raw Material/Fuel: Seed solution, Water, Ammonia, Nutrients
Rated Capacity: 320,000 liters

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)“d”

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.35 lb/hr

Authority for Requirement: DNR Construction Permit 07-A-1067-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.68 lb/hr

Authority for Requirement: DNR Construction Permit 07-A-1067-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf, 0.68 lb/hr

Authority for Requirement: 567 IAC 23.3(2)“a”

DNR Construction Permit 07-A-1067-S2

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.23 lb/hr

Authority for Requirement: DNR Construction Permit 07-A-1067-S2

NSPS/NESHAP Applicability

This emission point is subject to 40 CFR 63 Subpart A *General Provisions and VVVVVV National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources.*

Authority for Requirement: DNR Construction Permit 07-A-1067-S2
567 IAC 23.1(4)"ev"

Operational Limits & Requirements

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

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

- A. Prior to the use of any new input material in this process, the Safety Data Sheet (SDS) for the material shall be reviewed through the management of change (MOC) process for VOC and HAP constituents. If VOC or HAP are present, the owner or operator shall supply product information to the Department for review and approval. This data shall include, but is not limited to:
 - a. A description of the new input material;
 - b. A Safety Data Sheet (SDS) for the new input material; and
 - c. Calculations showing the potential VOC, single HAP, and total HAP emissions from this emission point (EP-20) with the new material.
- B. The owner or operator shall operate and maintain the Cyclone (CE JC-2411-C), Cyclone (CE JC-2412-C), and Ammonia Scrubber (CE AS-2413-C) according to the manufacturer specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Cyclone (CE JC-2411-C), Cyclone (CE JC-2412-C), and Ammonia Scrubber (CE AS-2413-C). This log shall include, but is not necessarily limited to:
 - a. The date and time any inspection and/or maintenance was performed on the Cyclone (CE JC-2411-C), Cyclone (CE JC-2412-C), or Ammonia Scrubber (CE AS-2413-C);
 - b. Any issues identified during the inspection and the date each issue was resolved;
 - c. Any issues identified during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member performing the maintenance or inspection.
- C. The owner or operator shall meet all of the management practices specified in 40 CFR §63.11495(a) that apply to the AFI Main Fermenter C (EU VM-2310-C).
- D. Per 40 CFR §63.11496(f), the owner or operator shall keep:
 - a. Safety Data Sheet (SDS) for any input material to any process covered under NESHAP Subpart VVVVVV;

- b. For any process with metal HAP as an input, the owner or operator shall keep records of the number of batches completed per month and the estimated metal HAP emissions; and,
 - c. The total emissions must be reevaluated before any process or operational change is made that affects emissions of metal HAP. If projected emissions increase to 400 lb/yr or more, the owner operator must be in compliance with one of the options for metal HAP process vents listed in Table 4 of NESHAP Subpart VVVVVV upon initiating operation under the new operating conditions.
- E. The liquid feed rate to the scrubber shall be maintained within 10% above or below the average liquid feed rate observed during the most recently accepted compliance test which demonstrated compliance with all applicable emission limitations. The pH of the scrubber liquid shall be maintained within a pH of 1 above or below the average scrubber liquid pH observed during the most recently accepted compliance test which demonstrated compliance with all applicable emission limitations.
- a. The owner or operator shall collect continuous data from the liquid flow and pH monitors. On an hourly basis, the average liquid flow rate and pH of the scrubber liquid shall be calculated. An alarm will sound if the hourly average liquid flow rate or pH of the scrubber liquid is outside of the applicable range established for this source. This data shall be collected during normal operating conditions, which is when the fermenter contains any fermentation media.
 - b. On an hourly basis, the owner or operator shall calculate the 3-hour average scrubber liquid feed rate and the pH of the scrubber liquid. An alarm will sound if the 3-hour average liquid flow rate or pH of the scrubber liquid is outside of the applicable range established for this source. The owner or operator shall record the date and time of the occurrence, corrective actions taken, and time until the scrubber parameters are back in the applicable range. This data shall be collected during normal operating conditions, which is when the fermenter contains any fermentation media for at least 3 successive hours.

Authority for Requirement: DNR Construction Permit 07-A-1067-S2
567 IAC 23.1(4)"ev"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 87
Stack Opening, (inches, dia.): 18
Exhaust Flow Rate (scfm): 6,524
Exhaust Temperature (°F): 93
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 07-A-1067-S2

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

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 21

Associated Equipment

Emission Unit	Emission Unit ID	Maximum Rated Capacity	Control Equipment
AFI-MSG Counterbex B Separator	NC-5610-B	24,500 lb/hr	Cyclone (CE JC-5612-B), and Baghouse (CE OB-5750-B)
AFI-Dryer B	DF-5620-B	9,183 lb/hr	Cyclone (CE JC-5622-B) and Baghouse (CE OB-5750-B)
AFI-Cooler B	DF-5624-B	9,183 lb/hr	Cyclone (CE JC-5622-C) and Baghouse (CE OB-5750-B)
AFI-FC B Separator	JC-5640-B	3,950 lb/hr	Cyclone (CE JC-5757-B) and Baghouse (CE OB-5750-B)
AFI-MC B Separator	JC-5628-B	9,183 lb/hr	Cyclone (CE JC-6570-B) and Baghouse (CE OB-5750-B)
AFI-#1 MSG Vibrating Conveyor B	MV-5611-B	9,183 lb/hr	Baghouse (CE OB-5750-B)
AFI-Bucket Elevator B	MB-5670-B	5,510 lb/hr	Baghouse (CE OB-5750-B)

Raw Material/Fuel: Process #1 MSG Crystal, Process MSG Crystal, Process Regular Crystal, Process Special Regular Crystal

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)“d”

⁽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).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.24 lb/hr

Authority for Requirement: DNR Construction Permit 07-A-1068-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.68 lb/hr

Authority for Requirement: DNR Construction Permit 07-A-1068-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf, 0.68 lb/hr
Authority for Requirement: 567 IAC 23.3(2)“a”
DNR Construction Permit 07-A-1068-S2

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 2.74 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-1068-S2

NSPS/NESHAP Applicability

This emission point is subject to 40 CFR 63 Subpart A *General Provisions and VVVVVV National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources.*

Authority for Requirement: DNR Construction Permit 07-A-1068-S2
567 IAC 23.1(4)"ev"

Operational Limits & Requirements

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

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

- A. Prior to the use of any new input material in this process, the Safety Data Sheet (SDS) for the material shall be reviewed through the management of change (MOC) process for VOC and HAP constituents. If VOC or HAP are present, the owner or operator shall supply product information to the Department for review and approval. This data shall include, but is not limited to:
 - a. A description of the new input material;
 - b. A Safety Data Sheet (SDS) for the new input material; and
 - c. Calculations showing the potential VOC, single HAP, and total HAP emissions from this emission point (EP-21) with the new material.
- B. The owner or operator shall operate and maintain the Cyclone (CE JC-5612-B), Cyclone (CE JC-5622-B), Cyclone (CE JC-5757-B), Cyclone (CE JC-6570-B), Cyclone (CE JC-5622-C), and Baghouse (CE OB-5750-B) according to the manufacturer specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Cyclone (CE JC-5612-B), Cyclone (CE JC-5622-B), Cyclone (CE JC-5757-B), Cyclone (CE JC-6570-B), Cyclone (CE JC-5622-C), and Baghouse (CE OB-5750-B). This log shall include, but is not necessarily limited to:
 - a. The date and time any inspection and/or maintenance was performed on the Cyclone (CE JC-5612-B), Cyclone (CE JC-5622-B), Cyclone (CE JC-5757-B), Cyclone (CE JC-6570-B), Cyclone (CE JC-5622-C), or Baghouse (CE OB-5750-B);

- b. Any issues identified during the inspection and the date each issue was resolved;
 - c. Any issues identified during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member performing the maintenance or inspection.
- C. The owner or operator shall maintain a differential pressure drop across the Baghouse (CE OB-5750-B) between 0.5 and 5 inches water column. The owner or operator shall:
- a. Install a digital monitoring device to measure the pressure drop across the Baghouse (CE OB-5750-B) within 90 days of the issuance of this permit;
 - b. Calibrate, operate, and maintain the monitoring device according to the manufacturer's specifications;
 - c. Operate the device at all times that Dryer B (EU DF-5620-B) and Baghouse (CE OB-5750-B) are in operation;
 - d. Monitor and record the pressure across the Baghouse (CE OB-5750-B) drop continuously while the process is in operation;
 - e. Calculate the average pressure drop readings over a time period not to exceed one hour;
 - f. Program an alarm to sound if the hourly average pressure drop is outside of the applicable range; and
 - g. On an hourly basis, the owner or operator shall calculate the 3-hour average pressure drop across the Baghouse (CE OB-5750-B). If the 3-hour average pressure drop range is not between 0.5 and 5 inches water column an alarm will sound and the owner or operator shall record the date and time of the occurrence, corrective actions taken, and the time until the pressured drop parameters are back in the applicable range. This data shall be collected during normal operating conditions, which is when the dryer has operated for at least 3 successive hours.
- D. The owner or operator shall comply with the applicable standards in 40 CFR Part 63, Subparts A [§60.1 – §60.19] and VVVVVV [§63.11494 – §63.11503], including those not specifically mentioned in this permit.
- E. The owner or operator shall meet all of the management practices specified in 40 CFR §63.11495(a) that apply to the AFI-MSG Counterbex B Separator (EU NC-5610-B), AFI-Dryer B (EU DF-5620-B), AFI-Cooler B (EU DF-5624-B), AFI-FC B Separator (EU JC-5640-B), AFI-MC B Separator (EU JC-5628-B), AFI-#1 MSG Vibrating Conveyor B (EU MV-5611-B), and AFI-Bucket Elevator B (EU MB-5670-B).
- F. Per 40 CFR §63.11496(f), the owner or operator shall keep:
- a. Safety Data Sheet (SDS) for any input material to any process covered under NESHAP Subpart VVVVVV;
 - b. For any process with metal HAP as an input, the owner or operator shall keep records of the number of batches completed per month and the estimated metal HAP emissions; and,
 - c. The total emissions must be reevaluated before any process or operational change is made that affects emissions of metal HAP. If projected emissions increase to 400 lb/yr or more, the owner operator must be in compliance with one of the options for metal HAP process vents listed in Table 4 of NESHAP Subpart VVVVVV upon initiating operation under the new operating conditions.

Authority for Requirement: DNR Construction Permit 07-A-1068-S2
567 IAC 23.1(4)"ev"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 61
Stack Opening, (inches, dia.): 29.25
Exhaust Flow Rate (scfm): 17,800
Exhaust Temperature (°F): 120
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 07-A-1068-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 22

Associated Equipment

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
KT-9020-A	AFI-Cooling Tower Cell A	240,000 gallons/hr	Mist Eliminator (CE KT-9020-A; 0.005% Drift Loss)
KT-9020-B	AFI-Cooling Tower Cell B	240,000 gallons/hr	Mist Eliminator (CE KT-9020-B; 0.005% Drift Loss)
KT-9020-C	AFI-Cooling Tower Cell C	240,000 gallons/hr	Mist Eliminator (CE KT-9020-C; 0.005% Drift Loss)
KT-9020-D	AFI-Cooling Tower Cell D	240,000 gallons/hr	Mist Eliminator (CE KT-9020-D; 0.005% Drift Loss)
KT-9020-E	AFI-Cooling Tower Cell E	240,000 gallons/hr	Mist Eliminator (CE KT-9020-E; 0.005% Drift Loss)

Raw Material/Fuel: Water, Treatment Chemicals

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)“d”

⁽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).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 1.0 lb/hr

Authority for Requirement: DNR Construction Permit 07-A-1069-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.0 lb/hr

Authority for Requirement: DNR Construction Permit 07-A-1069-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf, 1.0 lb/hr

Authority for Requirement: 567 IAC 23.3(2)“a”
DNR Construction Permit 07-A-1069-S1

Operational Limits & Requirements

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

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

- A. The Total Dissolved Solids (TDS) concentration in the cooling water shall not exceed 2000 parts per million by weight (2000 mg/L) for any single sampling event. The owner or operator shall conduct TDS testing on a quarterly basis. Approved testing includes conductivity testing with a correlation to determine the TDS concentration. The owner or operator shall maintain records of the quarterly TDS sampling/testing results. The records shall include the testing dates and the methods used to determine the concentration of TDS in the circulating water. Each test shall be completed at least two months after the previous test.
- B. The owner or operator shall not use chromium based, VOC containing, or HAP containing water treatment chemicals (biocides, fungicides, scale inhibitors, etc) in this cooling tower. The owner or operator shall maintain a copy of the Safety Data Sheets (SDS) for each water treatment chemical used in this cooling tower.
- C. The cooling tower cells and mist eliminators shall be operated and maintained according to the manufacturer's specification with inspections occurring at a minimum of once per calendar year. A log of all maintenance and inspection activities performed on the cooling tower cells and mist eliminators. This log shall include, but is not limited to:
 - a. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - b. Any issue(s) identified during the inspection and the date each issue(s) was resolved;
 - c. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved; and,
 - d. Identification of the staff member performing the inspection or maintenance activity.

Authority for Requirement: DNR Construction Permit 07-A-1069-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 20
Stack Opening, (inches, dia.): 264
Exhaust Flow Rate (scfm): 2,540,000 (5 cells total, each at 508,000 scfm)
Exhaust Temperature (°F): 70
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 07-A-1069-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 23

Associated Equipment

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
KT-9020-2A	AFI-Cooling Tower Cell A	315,000 gallons/hr	Mist Eliminator (CE KT-9020-2A; 0.005% Drift Loss)
KT-9020-2B	AFI-Cooling Tower Cell B	315,000 gallons/hr	Mist Eliminator (CE KT-9020-2B; 0.005% Drift Loss)
KT-9020-2C	AFI-Cooling Tower Cell C	315,000 gallons/hr	Mist Eliminator (CE KT-9020-2C; 0.005% Drift Loss)
KT-9020-2D	AFI-Cooling Tower Cell D	315,000 gallons/hr	Mist Eliminator (CE KT-9020-2D; 0.005% Drift Loss)

Raw Material/Fuel: Water, Treatment Chemicals

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)“d”

⁽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).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 1.05 lb/hr

Authority for Requirement: DNR Construction Permit 07-A-1070-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.05 lb/hr

Authority for Requirement: DNR Construction Permit 07-A-1070-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf, 1.05 lb/hr

Authority for Requirement: 567 IAC 23.3(2)“a”

DNR Construction Permit 07-A-1070-S2

Operational Limits & Requirements

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

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

- A. The Total Dissolved Solids (TDS) concentration in the cooling water shall not exceed 2000 parts per million by weight (2000 mg/L) for any single sampling event. The owner or operator shall conduct TDS testing on a quarterly basis. Approved testing includes conductivity testing with a correlation to determine the TDS concentration. The owner or operator shall maintain records of the quarterly TDS sampling/testing results. The records shall include the testing dates and the methods used to determine the concentration of TDS in the circulating water. Each test shall be completed at least two months after the previous test.
- B. The owner or operator shall not use chromium based, VOC containing, or HAP containing water treatment chemicals (biocides, fungicides, scale inhibitors, etc) in this cooling tower. The owner or operator shall maintain a copy of the Safety Data Sheets (SDS) for each water treatment chemical used in this cooling tower.
- C. The cooling tower cells and mist eliminators shall be operated and maintained according to the manufacturer's specification with inspections occurring at a minimum of once per calendar year. A log of all maintenance and inspection activities performed on the cooling tower cells and mist eliminators. This log shall include, but is not limited to:
 - a. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - b. Any issue(s) identified during the inspection and the date each issue(s) was resolved;
 - c. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved; and,
 - d. Identification of the staff member performing the inspection or maintenance activity.

Authority for Requirement: DNR Construction Permit 07-A-1070-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 33
Stack Opening, (inches, dia.): 264
Exhaust Flow Rate (scfm): 2,032,000 (4 cells total, each at 508,000 scfm)
Exhaust Temperature (°F): 70
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 07-A-1070-S2

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

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 24

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): TC-5370
Emissions Control Equipment ID Number: OB-5370
Emissions Control Equipment Description: Baghouse
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: TC-5370
Emission Unit Description: AFI-Activated Carbon Silo
Raw Material/Fuel: Activated Carbon
Rated Capacity: 28,000 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)“d”

⁽¹⁾An exceedance of the indicator opacity of 25% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.84 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-555-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.03 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-555-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf, 1.03 lb/hr

Authority for Requirement: 567 IAC 23.3(2)“a”

DNR Construction Permit 11-A-555-S1

Operational Limits & Requirements

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

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

- A. The owner or operator shall operate and maintain the Baghouse (CE OB-5370) according to the manufacturer specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Baghouse (CE OB-5370). This log shall include, but is not necessarily limited to:
 - a. The date and time any inspection and/or maintenance was performed on the Baghouse (CE OB-5370);
 - b. Any issues identified during the inspection and the date each issue was resolved;
 - c. Any issues identified during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 11-A-555-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 45

Stack Opening, (inches, dia.): 6

Exhaust Flow Rate (scfm): 1,200

Exhaust Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 11-A-555-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 25

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): PC-9011-A

Emissions Control Equipment ID Number: N/A

Emissions Control Equipment Description: N/A

Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: PC-9011-A

Emission Unit Description: Fire Water Diesel Pump

Raw Material/Fuel: Diesel

Rated Capacity: 185 hp

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)“d”

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)“a”

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)“b”

NSPS/NESHAP Applicability:

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE).

According to 40 CFR 63.6590(a)(1)(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.

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

Operational Limits & Requirements

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

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 Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 26

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): DF-3300
Emissions Control Equipment ID Number: OB-3307, JC-3305
Emissions Control Equipment Description: Baghouse, Cyclone
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: DF-3300
Emission Unit Description: AFI Fluidized Bed Dryer
Raw Material/Fuel: Amino Acid
Rated Capacity: 1,030 lb/hr (wet product)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)“d”

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.33 lb/hr

Authority for Requirement: DNR Construction Permit 21-A-013-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.33 lb/hr

Authority for Requirement: DNR Construction Permit 21-A-013-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf, 0.33 lb/hr

Authority for Requirement: 567 IAC 23.3(2)“a”

DNR Construction Permit 21-A-013-S1

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.1 lb/hr

Authority for Requirement: DNR Construction Permit 21-A-013-S1

NSPS/NESHAP Applicability

This emission point is subject to 40 CFR 63 Subpart A *General Provisions and VVVVVV National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources*.

Authority for Requirement: DNR Construction Permit 21-A-013-S1
567 IAC 23.1(4)"ev"

Operational Limits & Requirements

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

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

- A. Prior to the use of any new input material in this process, the Safety Data Sheet (SDS) for the material shall be reviewed through the management of change (MOC) process for VOC and HAP constituents. If VOC or HAP are present, the owner or operator shall supply product information to the Department for review and approval. This data shall include, but is not limited to:
 - a. A description of the new input material;
 - b. A Safety Data Sheet (SDS) for the new input material; and
 - c. Calculations showing the potential VOC, single HAP, and total HAP emissions from this emission point (EP-26) with the new material.
- B. The owner or operator shall operate and maintain the Cyclone (CE JC-3305) and Baghouse (CE OB-3307) according to the manufacturer specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Cyclone (CE JC-3305) and Baghouse (CE OB-3307). This log shall include, but is not necessarily limited to:
 - a. The date and time any inspection and/or maintenance was performed on the Cyclone (CE JC-3305) and Baghouse (CE OB-3307);
 - b. Any issues identified during the inspection and the date each issue was resolved;
 - c. Any issues identified during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member performing the maintenance or inspection.
- C. The owner or operator shall maintain a differential pressure drop across the Baghouse (CE OB-3307) between 0.5 and 5 inches water column. The owner or operator shall:
 - a. Install a monitoring device to measure the pressure drop across the Baghouse (CE OB-3307);
 - b. Calibrate, operate, and maintain the monitoring device according to the manufacturer's specifications;
 - c. Operate the device at all times that the Fluidized Bed Dryer (EU DF-3300) and Baghouse (CE OB-3307) are in operation;

- d. Monitor and record the pressure across the Baghouse (CE OB-3307) drop continuously while the process is in operation; and
 - e. Calculate the average pressure drop readings over a time period not to exceed one hour;
 - f. Program an alarm to sound if the hourly average pressure drop is outside of the applicable range; and
 - g. On an hourly basis, the owner or operator shall calculate the 3-hour average pressure drop across the Baghouse (CE OB-3307). If the 3-hour average pressure drop range is not between 0.5 and 5 inches water column an alarm will sound and the owner or operator shall record the date and time of the occurrence, corrective actions taken, and the time until the pressured drop parameters are back in the applicable range. This data shall be collected during normal operating conditions, which is when the dryer has operated for at least 3 successive hours.
- D. The owner or operator shall comply with the applicable standards in 40 CFR Part 63, Subparts A [§60.1 – §60.19] and VVVVVV [§63.11494 – §63.11503], including those not specifically mentioned in this permit.
- E. The owner or operator shall meet all of the management practices specified in 40 CFR §63.11495(a) that apply to the AFI-MPG Dryer (EU DF-3300).
- F. Per 40 CFR §63.11496(f), the owner or operator shall keep:
- a. Safety Data Sheet (SDS) for any input material to any process covered under NESHAP Subpart VVVVVV;
 - b. For any process with metal HAP as an input, the owner or operator shall keep records of the number of batches completed per month and the estimated metal HAP emissions; and,
 - c. The total emissions must be reevaluated before any process or operational change is made that affects emissions of metal HAP. If projected emissions increase to 400 lb/yr or more, the owner operator must be in compliance with one of the options for metal HAP process vents listed in Table 4 of NESHAP Subpart VVVVVV upon initiating operation under the new operating conditions.

Authority for Requirement: DNR Construction Permit 21-A-013-S1
567 IAC 23.1(4)"ev"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 68
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 1,800
Exhaust Temperature (°F): 120
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 21-A-013-S1

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

Monitoring Requirements

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 27

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): B190476852

Emissions Control Equipment ID Number: N/A

Emissions Control Equipment Description: N/A

Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: B190476852

Emission Unit Description: R&D Facility Backup LP Generator

Raw Material/Fuel: LP Gas

Rated Capacity: 20 kW

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)“d”

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)“a”

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)“b”

NSPS/NESHAP Applicability:

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(iii) this emergency engine, located at an area source, is a new stationary RICE as it was constructed on or after June 12, 2006. AFI is not a major source of HAP.

According to 40 CFR 63.6590(c)(1), a new stationary RICE located at an area source of HAP emissions must meet the requirements of Part 63 by meeting the requirements of 40 CFR Part 60 Subpart JJJJ for spark ignition engines. No further requirements apply for this engine under Part 63.

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

Operational Limits & Requirements

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

For engines > 25 hp, constructed after 6/12/2006 and manufactured on or after 1/1/2009: Emergency, SI, Gasoline and Rich Burn LPG

Certification Requirements:

According to 60.4231(b) and 60.4233(b) (for gasoline engines) or 60.4231(c) and 60.4233(c) (for rich burn LPG engines), the engine manufacturers must certify these engines to the following emission standards in grams/kW-hr (grams/HP-hr) and other requirements for new nonroad SI engines in 40 CFR Part 90 or 1048 as follows:

Limits in grams/kW-hr (grams/HP-hr) - see rule for alternative standards

Maximum Engine Power	HC + NOx	CO	Rule Reference
19 < kW < 300 (25 < HP < 130)	13.4 (10.0)	519 (387)	40 CFR 90
100 ≤ kW (130 ≤ HP)	2.7 (2.0)	4.4 (3.3)	40 CFR 1048
	2.7 (2.0) ⁽¹⁾	130 (97.0) ⁽¹⁾	40 CFR 1048

⁽¹⁾ Severe-duty engines are used in, for example, concrete saws, concrete pumps and similar severe applications where air-cooled engines must be used.

Engines that burn gasoline must meet gasoline sulfur standards listed below.

- 10.00 ppm from a gasoline manufacturer
- 80 ppm from any fuel manufacturing facility gate
- 95 ppm from any downstream location
- 10 ppm from any importer

See 40 CFR 60.4235 and 40 CFR 1090.205.

Requirements for Certified SI Engines:

1. Owners and operators must keep a record from the manufacturer that the engines are certified to meet applicable emission standards. 40 CFR 60.4245(a)(3).

2. Owners and operators of SI engines that are required to be certified and who operate and maintain the engine according to the manufacturer's written instructions must keep records of required maintenance. 40 CFR 60.4243(a)(1).

Requirements for Non-Certified SI Engines:

1. Owners and operators of non-certified engines must keep records of the documentation that these engines meet the applicable emission standards. 40 CFR 60.4245(a)(4).
2. Engines that are required to be certified that are not operated and maintained according to manufacturer's written instructions are considered to be non-certified engines. Owners and operators of such a non-certified SI engine must keep a maintenance plan and records of conducted maintenance and must maintain and operate the engine in a manner consistent with good air pollution control practice to minimize emissions. In addition, the following non-certified SI must conduct the performance test in accordance with 40 CFR 60.4244. Owners and operators are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 4243(a) for additional information.

Maximum Engine Power	Initial Test	Subsequent Test
HP < 100	Not required	Not required
100 ≤ HP ≤ 500	Within 1 year of engine startup	Not required
500 < HP	Within 1 year of engine startup	Every 8,760 hours or 3 years, whichever comes first

Operating and Recordkeeping Requirements (40 CFR 4243(d))

1. Owners and operators of the following emergency SI engines that do not meet the applicable standards for non-emergency engines must install a non-resettable hour meter. 40 CFR 60.4237.

Maximum Engine Power	Engine Was Built On Or After
HP < 130	7/1/2008
130 ≤ HP < 500	1/1/2011
500 ≤ HP	7/1/2010

2. There is no time limit on the use of the emergency engine in emergency situations.
3. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours/year.
4. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing.
5. Owners and operators of an emergency engine must keep records of all operation of the engine. The owner must record the date and time of operation of the engine and the reason the engine was in operation.
6. Owners and operators of the following emergency SI that does not meet the applicable standards for a non-emergency engine must keep the following records. 40 CFR 60.4245(b).

Maximum Engine Power	Manufactured On Or After	Recordkeeping Requirement
25 < HP < 130	7/1/2008	Hours of operation recorded through a non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
130 ≤ HP < 500	7/1/2011	
500 ≤ HP	7/1/2010	

Authority for Requirement: 40 CFR Part 60 Subpart JJJJ
567 IAC 23.1(2)"zzz"

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

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

G1. Duty to Comply

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

G2. Permit Expiration

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

G3. Certification Requirement for Title V Related Documents

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

G4. Annual Compliance Certification

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

G5. Semi-Annual Monitoring Report

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

G6. Annual Fee

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

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

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

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

G8. Duty to Provide Information

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

G9. General Maintenance and Repair Duties

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

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

G10. Recordkeeping Requirements for Compliance Monitoring

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

- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

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

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

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

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
- b. Compliance test methods specified in 567 Chapter 25; or
- c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

- a. Any monitoring or testing methods provided in these rules; or
- b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

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 or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." – See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

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

G15. Permit Deviation Reporting Requirements

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

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

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

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

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
 - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
 - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
 - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
 - d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));
 - e. The changes comply with all applicable requirements.
 - f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
 - vii. Any permit term or condition no longer applicable as a result of the change.
2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*
3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*
4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*
5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

- a. An administrative permit amendment is a permit revision that does any of the following:
 - i. Correct typographical errors
 - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - iii. Require more frequent monitoring or reporting by the permittee; or
 - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
- b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
- c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.

- a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
 - i. Do not violate any applicable requirement;
 - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
 - iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
 - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
 - v. Are not modifications under any provision of Title I of the Act; and
 - vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B).
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
 - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
 - ii. The permittee's suggested draft permit;
 - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.

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

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

G19. Duty to Obtain Construction Permits

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

G20. Asbestos

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

G21. Open Burning

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

G22. Acid Rain (Title IV) Emissions Allowances

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

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

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
 - b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
 - c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
 - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.

- d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
 4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
 5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
 - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
 - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
 - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a"*, *567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
 - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;

- b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
- c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
- d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
- e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. *567 IAC 22.114(3)*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

- a. Such applicable requirements are included and are specifically identified in the permit; or
- b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

3. A permit shield shall not alter or affect the following:

- a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
- d. The ability of the department or the administrator to obtain information from the facility pursuant to 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 2

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

Field Office 3

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

Field Office 4

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

Field Office 5

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

Field Office 6

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

Polk County Public Works Dept.

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

Linn County Public Health

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

V. Appendices

40 CFR 63 Subpart A - General Provisions

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-A>

40 CFR 63 Subpart VVVVVV - National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-VVVVVV>

40 CFR 63 Subpart ZZZZ

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-ZZZZ>