Iowa Department of Natural Resources Draft Title V Operating Permit

Name of Permitted Facility: Archer Daniels Midland-Des Moines Soybean Plant Facility Location: 1935 E. Euclid, Des Moines, IA Air Quality Operating Permit Number: 04-TV-020-R1 Expiration Date: April 22, 2019 Permit Renewal Application Deadline: October 22, 2018

EIQ Number: 92-6313 Facility File Number: 77-01-045

<u>Responsible Official</u> Name: Mr. Mike Carstens Title: Plant Manager Mailing Address: 1935 E. Euclid Des Moines, Iowa 50316 Phone Number: 515-263-3285

Permit Contact Person for the Facility Name: Kevin Jensen Title: Environmental Coordinator Mailing Address: 1935 E. Euclid Des Moines, Iowa 50316 Phone Number: 515-263-3285

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.

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For the Director of the Department of Natural Resources

Hansen

4/23/2014

Lori Hanson, Supervisor of Air Operating Permits Section

04-TV-020-R1, April 23, 2014

Date

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Abbreviations

acfm	actual cubic feet per minute
	AMS/EPA Regulatory Model
AQD	Polk County Public Works- Air Quality Division
	Chemical Abstract Service Registry
СЕ	Control Equipment
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulation
°F	degrees Fahrenheit
DNR	Iowa Department of Natural Resources
EIQ	Emissions Inventory Questionnaire
ЕР	Emission Point
EU	Emission Unit
gr./dscf	grains per dry standard cubic foot
IAC	Iowa Administrative Code
MACT	Maximum Achievable Control Technology
$\mu g/m^3$	Micrograms per Cubic Meter
MM BTU/ Hr	Million British Thermal Units per Hour
	Material Safety Data Sheet(s)
MVAC	Motor Vehicle Air Conditioner
	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NSPS	New Source Performance Standard
	parts per million by volume
psia	pounds per square inch absolute
lb./hr	pounds per hour
lb./MMBtu	pounds per Million British thermal units
	Source Classification Codes
scfm	standard cubic feet per minute
	standard dry cubic feet per minute
SIC	Standard Industrial Classification
TPY	
	United States Environmental Protection Agency
VCU	Vapor Combustion Unit

Pollutants

GHG	Green House Gases
PM	Particulate Matter
PM ₁₀	Particulate Matter ten microns or less in diameter
PM _{2.5}	Particulate Matter 2.5 microns or less in diameter
SO ₂	Sulfur dioxide
NO _x	Nitrogen Oxides
VOC(s)	Volatile Organic Compound(s)
СО	Carbon Monoxide
HAP(s)	Hazardous Air Pollutant(s)

I. Facility Description and Equipment List

Facility Name: Archer Daniels Midland - Des Moines Soybean Plant Permit Number: 04-TV-020-R1

Facility Description: This facility produces soybean meal and refined vegetable oil. The Des Moines plant also maintains a coal fired cogeneration facility for the generation of process steam and electricity.

Soybeans are received at the Des Moines facility by either truck or railcar. The beans are then cleaned and conveyed to storage. When the beans have high moisture content, such as during harvest time, they may be dried in a soybean heater located onsite. Processing of the soybeans includes drying, cracking, de-hulling and flaking prior to vegetable oil extraction. Hulls removed from the bean are ground and possibly pelletized to aid in hull transfer/load-out. The defatted flakes from the extraction process are sent through a series of processes that de-solventize, dry and grind the resulting meal. The meal and hulls/pellets are transferred to storage until loaded out either by rail or truck. The vegetable oil extracted from the soybeans is separated from the solvent used in the

extraction process and then sent to the onsite vegetable oil refinery for further processing. The refining process removes impurities and residual solvent in the oil.

Equipment List

Emission Point Number	Emission Unit Number	Associated Emission Unit Description	Polk County / DNR Construction Permit Number
C01	C01	Cool Bossining / Conversing	
		Coal Receiving / Conveying	87-A-014-S2
<u>C02</u>	C02	Coal Storage Coal Feeders	94-A-378-S1
<u>C03</u>	C03		95-A-027-S1
<u>C04</u>	C04	Limestone Receiving / Daybin	94-A-379-S1
<u>C05</u>	C05	Coal-fired main Boiler	87-A-013-P3
C06A	C06	Fly Ash Conveying	87-A-021-S1
C06B	C06B	Fly Ash Loadout	09-A-413
<u>C07</u>	<u>C07</u>	Fly Ash Silo	87-A-022-S90
C09	C09	Primary Standby Boiler	88-A-203-S3
C09A	C09	Primary Standby Boiler By-Pass	09-A-414
C012	C012	Caterpillar Diesel Generator	1115 Modified
C013	C013	61.5 MMBtu Nebraska Boiler	2530
GP02	GP02	(2) – 500,000 bushel Bean Storage Tanks	Grandfathered
GP04A	GP04	Conveying to Processing /Bean Cleaning	1892 Modified
GP05A	GP05	Escher Wyss Conditioning / Dehulling	1407 Modified #3
GP06A	GP06A	Flaking Roll Aspiration System	1618 Modified #5
GP07	GP07	Conveying to Extractor	0103 Modified #2
GP09A	GP09A	Extractor (Solvent Bubble)	07-A-1078P
	GP014	(2)-30,000 gallon Hexane Tanks	
	MP01	Desolventizer Toaster	
GP013	GP013	Natural Gas Emergency Lighting Generator	Exempt
GP015A	GP015A	Prep Vacuum System	0092 Modified
GP016	GP016	Soybean Heater	2343
GP018	GP018	Emergency Fire Pump at Extraction Plant	Grandfathered
HR01A	HR01A	Secondary Aspiration / Hull Gravity Tables	2531
	GP011	Daybin / Conveying to Aspirator / Whole Bean Aspiration	
HR02A	HR02A	Hull Grinding	0100 Modified #5
	MP04	Flowability Agent Silo	
HR03	HR03	Pellet Cooler	88-A-084-S1
HR04	HR04	Hull / Pellet Storage	09-A-412
MP01	MP01	Dryer / Cooler (DTDC)	1626 Modified #3
MP02A	MP02A	Meal Grinding	0090 Modified #4
	MP03	Meal Transfer	
MP05	MP05	Meal Building / Meal Conveying	0102 Modified
MP06	MP06	Meal Truck Load-out	2128
MP07A	MP07	Meal Rail Load-out	0105 Modified #2
MP08A	MP08A	Meal Tank Number 1	2340
MP08B	MP08A	Concrete Meal Tank Number 2	2340
MP08C	MP08A	Meal Tank Number 3	2340
MP09A	MP09A	East Meal Blend Tank	2129
MP09B	MP09B	West Meal Blend Tank	2129
MP010	MP010	Meal/ Hull Unloading Pit	1775
R01	R01	Filter Aid Receiving / Storage	0366
R02	R02	Bleaching Clay Receiving / Storage	0367
R03	R03	Slurry / Precoat Tanks	0414 Modified #2
R04	R04	Filter Aid / Bleaching Clay Daybins	0368, 0369
R06	R06	3 Cell Refinery Cooling Tower	2134

Emission Point Number	Emission Unit Number	Associated Emission Unit Description	Polk County / DNR Construction Permit Number
R07	R07	Refinery Steam Generator	2202
R08	R08	Emergency Fire Pump at Refinery	Grandfathered
U03	U03	Rail Receiving Number 1 and Conveying	0802 Modified
U03F	U03	Rail Receiving Fugitive Emissions	0802 Modified
U05, U05A	U05	Grain Storage – 4 west Bean Tanks	2595
U07	U01	West Truck Receiving	2235
	U02	East Truck Receiving	
	U04	Grain Conveying	
U08	U08	Fugitive Road Emissions	1979

Insignificant Equipment List Insignificant Emission Insignificant Emission Unit Description Unit Number IA3 **Refinery Bag Unloading System** (2) 15,000 gallon No. 2 Fuel Oil Tanks IA5 **3196 gallon Dilute Acid Tank** IA6 IA7 **10,000 gallon Concentrated Acid Tank Yard Waste Hopper** IA8 790 gallon Primary Boiler Lube Oil Tank **IA10** 15,863 gallon Working Loss Wastewater Tank **IA11** Vent Off Sewer Line **IA12 IA14 CoGen Cooling Tower IA15 Extraction Cooling Tower Hot Gas Generator IA16** (2) 15,000 gallon Cogen No. 2 Fuel Oil Tanks **IA17** (1) 300 gallon Cogen Cat No. 2 Fuel Oil Tank **IA18** 2.4 MMBTU Kenton Boiler **IA19** 2.4 MMBTU Kenton Boiler **IA20**

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II. Plant-Wide Conditions

Facility Name: Archer Daniels Midland – Des Moines Soybean Plant Permit Number: 04-TV-020-R1

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

Permit Duration

The term of this permit is: Five (5) years from the date of permit issuance. Commencing on: April 23, 2014 Ending on: April, 22, 2019

Amendments, modifications and re-openings 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.

Plant-Wide Emission Limits

Unless specified otherwise in the Emission Point Specific Conditions, the source is subject to the specified emission limit and supporting regulation:

Opacity (visible emissions):	<20% opacity
Authority for Requirement:	Polk County Board of Health Rules and Regulations
	Chapter V, Article IV, Section 5-9

Sulfur Dioxide (SO₂): 500 parts per million by volume

Authority for Requirement: 567 IAC 23.3(3)"e" Polk County Board of Health Rules and Regulation Chapter V, Article IX, Section 5-27

<u>Particulate Matter:</u> If the Polk County Health Officer determines that a process complying with the emission rates specified in Table 1 of Section 5-15 of Polk County Board of Health Rules and Regulations Chapter V is causing or will cause air pollution, the Polk County Health Officer will notify the source of such determination. Upon notification, the source shall not emit particulates in amounts greater than 0.10 grain per standard cubic foot of exhaust gas.

Authority for Requirement: Polk County Board of Health Rules and Regulations Chapter V, Article VI, Section 5-14(b) *Combustion for indirect heating:* Inside any metropolitan statistical area, the maximum allowable emission from each stack, irrespective of stack height, shall be 0.6 pounds of particulates per million Btu input.

Authority for Requirement: 567 IAC 23.3(2)"b"(2) Polk County Board of Health Rules and Regulations Chapter V, Article VI, Section 5-15(b)

<u>Fugitive Dust:</u> It shall be unlawful for any person handling, loading, unloading, reloading, storing, transferring, transporting, placing, depositing, throwing, discarding, or scattering any ashes, fly ash, cinders, slag or dust collected from any combination process, any dust, dirt, chaff, wastepaper, trash, rubbish, waste or refuse matter of any kind, or any other substance or material whatever, which is likely to be scattered by the wind, or is susceptible to being wind-borne, to do so without taking reasonable precautions or measures to prevent particulate matter from becoming airborne so as to minimize atmospheric pollution.

Authority for Requirement: Polk County Board of Health Rules and Regulations Chapter V, Article IX, Section 5-24

Operational Limits & Requirements

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

The facility shall not process more than 1,697,250 tons of soybeans per 12-month rolling period, rolled monthly.

The facility shall record and maintain daily records of the number of tons of soybeans processed.

The facility shall only process hulls derived from soybeans accounted for in the facility throughput records.

For purposes of Prevention of Significant Deterioration (PSD) determination:

The facility shall calculate the actual emissions, and the emission increase of this project for the emission units tabled below for a rolling 12 month period.

The rolling 12 month period shall start the first full month after construction of the project is completed.

The facility shall calculate said report for a period of 10 years.

For this report project emission increase equals the reported actual emissions minus the baseline actual emissions minus the emissions increase that is unrelated to the project and that could have been accommodated by the facility in absence of the project. For purposes of determining the emissions increase that is unrelated to the project, a production rate of 1,259,980 (1,390,480 for elevator sources) tons per 12-month rolling period represents the processing rate that could have been accommodated by the facility in absence of the project.

EP ID(s)	EU ID(s)	CE (ID)	Description	Baseline Emissio	e Actual ons (TPY)
				PM	PM10
U01/U02/U07	U01/U02/U08	U01	Truck Receiving	1.96	0.58
U03/U06	U03/U07	U03	Rail Receiving	0.04	0.04
U06F	U06F	N/A	Rail Receiving Fugitives	0.33	0.08
U04/GP010	U04/GP010	U04	Grain Conveying	1.05	1.05
U05	U05	N/A	Grain Storage	0.30	0.30
GP02	GP02	N/A	Bean Storage Tanks	0.06	0.06
GP04	GP04	GP04	Soybean conveying to processing	1.02	1.02
GP05	GP05	GP05	Conditioning/Dehulling Cyclone	1.21	0.79
GP05A	GP05	GP05A	Conditioning/Dehulling Baghouse	0.97	0.97
GP06A	GP06A	GP06A	Flaking	22.28	3.94
GP07	GP07	N/A	Conveyor to Extractor	5.41	5.41
GP016	GP016	GP016	New Bean Heater	0.00	0.00
HR01A	HR01a/GP011	HR01a	Hull Gravity Tables/Secondary Aspiration	6.24	6.24
HR02a	HR02a	HR02a	Hull Grinding	0.20	0.20
HR03	HR03	HR03	Pellet Cooler	0.77	0.77
HR04	HR04	N/A	Hull/Pellet Storage	0.02	0.02
MP01A,B,C,D,E	MP01A-E	MP01A-D	Desolventizer Toaster, Dryer Cooler	1.59	1.59
MP02	MP02	MP02	Meal Grinding	1.54	1.54
MP03	MP03	MP03	Meal Transfer	0.76	0.76
MP04	MP04	MP04	Flowability Agent Receiving/Storage	0.04	0.04
MP05	MP05	MP05	Meal Building/Meal Conveying	0.76	0.76
MP06, MP07	MP06	MP06	Truck & Rail Loadout	2.03	2.03
MP08	MP08	N/A	Meal through concrete tank	0.01	0.01
MP08	MP08	N/A	Total Meal through tank	0.15	0.15
MP08a,b,c	MP08	MP08a,b,c	Meal Storage (new)	0.00	0.00
MP09	MP09	N/A	Meal Blend Tanks	0.04	0.04
MP011A	MP011	MP011A	Secondary Meal Cooler Decks 1& 2	0.00	0.00
MP011B	MP011	MP011B	Secondary Meal Cooler Deck 3	0.00	0.00
R01	R01	R01	Filter Aid Receiving/Storage	0.002	0.002
R02	R02	R02	Bleaching Clay Receiving/Storage	0.01	0.01
R03	R03	R03	Slurry/Precoat Tanks	0.01	0.01
R04	R04	R04a, 4b	Filter Aid/Bleaching Clay Bins	0.01	0.01
U08	U08	N/A	Fugitive Road Emissions	119.75	23.36
			Sum of baseline actual emissions	168.56	51.782

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Baseline actual emissions are included in the table below for the effected emission units.

Actual Emission increases for the above listed sources shall not exceed the significance levels for PSD (25 TPY of PM or 15 TPY of PM10) for this project. If these significance levels are exceeded the facility shall submit notification to Polk County AQD within 30 days of the violation and shall submit to IDNR a PSD Construction Permit Application within 60 days of the violation.

At the completion of the 10 year reporting period, if no violation of the PSD significance levels has occurred, the emission limits stated in section 9.0 of this permit shall remain in effect. The facility at this time may request a construction permit modification to remove the PSD determination requirements from this permit.

All records shall be maintained on site for a period of not less than 5 years and shall be made available to representatives of this agency upon request.

Authority for Requirement: Polk County Construction Permits Numbered 0090 Modified Number4, 0100 Modified Number 4, 0102 Modified, 0103 Modified Number2, 0105 Modified Number2, 1407 Modified Number3, 1618 Modified Number5, 1626 Modified Number3, 1979, 2128, 2129, 2235, 2340, 2343, 2531.

NESHAP:

The facility is subject to subpart GGGG-National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production, promulgated. The subpart will be annotated in the plantwide conditions as being applicable to the facility, and placed in its entirety in Appendix A of the Title V Permit. Authority for Requirement: 40 CFR Part 63 Subpart GGGG, 567 IAC 23.1(4)"cg"

The facility operates a diesel fired Caterpillar Limited Use Generator (EU C012) and a natural gas fired Emergency Lighting Generator (EU GP013). This equipment is subject to National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion [40 CFR Part 63 Subpart ZZZZ]. Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ. 567 IAC 23.1(4)"cz"

The facility operates a coal fired Multi-bed Fluidized Combustion Boiler (EU C05, C05A), a 175 MMBtu/hr steam generator combusting natural gas or No. 2 fuel oil (EU C09), a 61.6 MMBtu boiler combusting natural gas (EU C013), and a 20 MMBtu/hr steam generator combusting natural gas (EU R07). This equipment is subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63 Subpart DDDDD]. The subpart will be placed in its entirety in Appendix B of the Title V Permit. Authority for Requirement: 40 CFR Part 63 Subpart DDDDD.

III. Emission Point-Specific Conditions

Facility Name: Archer Daniels Midland - Des Moines Soybean Facility Permit Number: 04-TV-020-R1

Emission Point ID Number: C01 – Coal Receiving/Conveying

Associated Equipment

Associated Emission Unit ID Number: C01 Emissions Control Equipment ID Number: C01 Emissions Control Equipment Description: MAC Baghouse Model 144MCF494-431

Emission Unit vented through this Emission Point: C01 Emission Unit Description: Coal Receiving/ Conveying Raw Material/Fuel: Coal Rated Capacity: 28.4 Tons/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 Limits: 0% Authority for Requirement: State of Iowa Construction Permit Number 87-A-014-S2

Pollutant: PM/PM10 Emission Limit: 1.63 lb/hr, 0.01gr/scf Authority for Requirement: State of Iowa Construction Permit Number 87-A-014-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 20.0 Stack Diameter (inches): 30.25 Stack Exhaust Flow Rate (scfm): 24,000 Stack Temperature (°F): Ambient Discharge Style: Vertical Unobstructed Authority for Requirement: State of Iowa Construction Permit Number 87-A-014-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the

emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Operational Limits & Requirements

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

<u>Hours of operation</u>: Shall not exceed 3,285 hours per year of fan operation per twelve (12) month rolling period, rolled monthly. (Note: This system is defined to be in operation any time the exhaust fan is operating.

<u>Control Equipment Parameters</u>: Shall inspect and maintain the control equipment according to manufacturer's specifications.

<u>Reporting & Record keeping</u>: Shall keep records of the number of hours the unit is operated, and update the twelve month rolling total on a monthly basis.

The owner and/or operator shall log all inspections and maintenance performed on the control equipment associated with this emission point. This log shall include, but not necessarily limited to:

a. The date and time the inspection or maintenance activity was initiated.

b. Identification of personnel performing the inspection or maintenance activity.

c. For inspections, any issues that were identified that need to be addressed.

d. For maintenance activities, any issues that were addressed during the maintenance activity..

Authority for Requirement: State of Iowa Construction Permit Number 87-A-014-S2

NSPS

This equipment is subject to the New Source Performance Standards: Standards of Performance for Coal Preparation Plants [40 CFR Part 60 Subpart Y].

Authority for Requirement: 40 CFR Part 60 Subpart Y.

567 IAC 23.1(2)"v"

Monitoring Requirements

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

EP C01 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🖂

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: C02 – Coal Storage

Associated Equipment

Associated Emission Unit ID Numbers: C02 Emissions Control Equipment ID Number: C02 Emissions Control Equipment Description: Carter Day Baghouse Model 72RJ37

Emission Unit vented through this Emission Point: C02 Emission Unit Description: Coal Storage Raw Material/Fuel: Coal Rated Capacity: 28.4 Tons/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: 0% Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 94-A-378-S1

Pollutant: PM/ PM10 Emission Limits: 0.154 lb/hr, 0.68 Ton/yr, 0.0072 gr/dscf Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 94-A-378-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 104 ft Stack Diameter (inches): 15 x 15 Stack Exhaust Flow Rate (scfm): 2500 Discharge Style: Horizontal Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 94-A-378-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

<u>NSPS</u>

This equipment is subject to the New Source Performance Standards: Standards of Performance for Coal Preparation Plants [40 CFR Part 60 Subpart Y]. Authority for Requirement: 40 CFR Part 60 Subpart Y. 567 IAC 23.1(2)"y"

Monitoring Requirements

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

EP C02 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observet of visible emissions. If corrective action does not return the observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🔀

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: C03 – Coal Feeders

Associated Equipment

Associated Emission Unit ID Number: C03 Emissions Control Equipment ID Number: C03 Emissions Control Equipment Description: MAC Equipment Baghouse Model Number 54AVS16

Emission Unit vented through this Emission Point: C03 Emission Unit Description: Coal Feeders Raw Material/Fuel: Coal Rated Capacity: 10.7 Tons/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: <20% Authority for Requirement: Polk County Board of Health Rules and Regulations Chapter V, Section 5-9 567 IAC 23.1(2)"v"

Pollutant: PM Emission Limit: 0.1 gr/scf Authority for Requirement: 567IAC – 23.3(2)"a" Iowa Department of Natural Resources Construction Permit Number 95-A-027-S1

Pollutant: PM10 Emission Limits: 0.023 lb/hr, 0.10 tons/yr, 0.01 gr/scf Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 95-A-027-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 72 Stack Diameter (inches): 4 Stack Exhaust Flow Rate (scfm): 272 Stack Temperature (°F): 110 Discharge Style: Downward Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 95-A-027-S1 The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

NSPS

This equipment is subject to the New Source Performance Standards: Standards of Performance for Coal Preparation Plants [40 CFR Part 60 Subpart Y]. Authority for Requirement: 40 CFR Part 60 Subpart Y. 567 IAC 23.1(2)"v"

Monitoring Requirements

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

EP C03 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🖂

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

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

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point. Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: C04 – Limestone Receiving/Daybin

Associated Equipment

Associated Emission Unit ID Number: C04 Emissions Control Equipment ID Number: C04 Emissions Control Equipment Description: MAC Baghouse Model 72AVS16

Emission Unit vented through this Emission Point: C04 Emission Unit Description: Limestone Receiving/Daybin Raw Material/Fuel: Limestone Rated Capacity: 1.99 Tons/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: 0% Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 94-A-379-S1

Pollutant: PM/ PM10 Emission Limits: 0.0514 lb/hr, 0.23 Ton/yr, 0.01 gr/scf Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 94-A-379-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 58 Stack Diameter (inches): 10 Stack Exhaust Flow Rate (scfm): 600 Stack Temperature (°F): Ambient Discharge Style: Horizontal Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number94-A-379-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

EP C04 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: C05 – Main Boiler, Startup

Associated Equipment

Associated Emission Unit ID Numbers: C05 Emissions Control Equipment ID Number: C05 Emissions Control Equipment Description: Aero-Pulse Baghouse Model Number RF-1296-(1224)-14-FS-Y-WP Continuous Emissions Monitors ID Numbers: ME-01 – CO, NOx, SO2 and Opacity.

Emission Unit vented through this Emission Point: C05 Emission Unit Description: Multi-bed Fluidized Combustion Main Boiler Raw Material/Fuel: Coal Rated Capacity: 192 MMBTU/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: 20% Opacity shall not exceed 20% (6-minute average), except for one (1) 6- minute period per hour of not more than 27% Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc"
Pollutant: Opacity Emission Limit: 15% Standard is expressed as a 6-minute average. Compliance with the opacity standard shall be demonstrated through the use of a Continuous Opacity Monitoring System (COMS). Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3 567 IAC 23.3(2)"d"
Pollutant: PM LAER Emission Limit: 0.04 lb/MM BTU of heat input (a) Standard is expressed as the average of three (3) runs and does not apply during periods of startup, shutdown, or malfunction (SSM). (b) Limit established when the Des Moines Area was designated non- attainment for PM and CO, Any relaxation in the Lowest Achievable Emission Rates (LAER) after the Des Moines Area is redesignated attainment for PM and/or CO is subject to review under the PSD

regulations in effect at the time the relaxation occurs. Authority for Requirement: USEPA PSD Permit as amended March 7, 1990 and subsequent dates. Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

Pollutant: PM
Emission Limit: 22 ng/J of heat input

(a) Standard is expressed as the average of three (3) runs
(b) Per 40 CFR §60.43b(a). 22 ng/J = 0.051 lb/MM BTU heat input
(c) Per 40 CFR §60.43b(g), The PM standard applies at all times, except during periods of startup, shutdown, or malfunction (SSM).

Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

40 CFR 60 Subpart Db
567 IAC 23.1(2)"ccc"

Pollutant: PM/ PM10 Emission Limits: 4.42 lb/hr Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

Pollutant: SO2

BACT Emission Limits: 0.85 lb/MM BTU of heat input

and 90% reduction of the equivalent inlet SO2 rate for coal supplies (or coal blends) which have an equivalent inlet SO2 rate greater than 2.0 lb/MM BTUs. The equivalent inlet sulfur dioxide SO2 rate means the stack emissions (on a lb/MMBTU heat input basis) that would result from the combustion of "as-fired" coal in the boiler without SO2 absorption, assuming 100 percent conversion of sulfur in the coal to SO2. This standard is a thirty (30) day rolling average and included periods of SSM.

0.20 lb/MM BTU (heat input) for coal supplies (or coal blends) which have an equivalent inlet SO2 rate less than or equal to 2.0 lb/MMBTU. This standard is a thirty (30) day rolling average and includes periods of SSM.

Authority for Requirement: USEPA PSD Permit as amended March 7, 1990 and subsequent dates. Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

Pollutant: SO2 Emission Limits: 87 ng/J (0.20 lb/MM BTU) heat input; or 10% (0.10) of the potential SO2 emission rate (90% reduction) and the emission limit determined according to the following formula:

 $R_{R} = \frac{KaHa + KbHb}{Ha + Hb}$

Where: E_s is the SO ₂ emission limit (in either ng/J or lb/MMBTU heat input) K_a is 520 ng/J or 1.2 lb/MMBTU K_b is 340 ng/J or 0.8 lb/MMBTU H_a is the heat input from the combustion of coal (in either J or MMBTU) H_b is the heat input from the combustion of oil (in either J or MMBTU)
Only the heat input supplied from the combustion of coal and oil is counted. No credit is provided for the heat input from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat input from other sources such as gas turbines, internal combustion engines, kilns, etc. This limit is a 30-day rolling average and applies at all times including periods of startup, shutdown, and malfunction. Authority for Requirement: 40 CFR60 Subpart A and Subpart Db NSPS Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3 567 IAC 23.1(2)"ccc"
Pollutant: SO2 Emission Limit: 157.94 TPY, 0.93 lb/MM BTU* (heat input) *Emission limit carried over from original EPA PSD permit. Limit was established by EPA to be protective of the National Ambient Air Quality Standards (NAAQS) and the increment. Standard is expressed as a twenty-four (24) hour average. This limit applies at all times except during periods of startup, shutdown, or malfunction (SSM).
Authority for Requirement: USEPA PSD Permit as amended March 7, 1990 and subsequent dates. Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3
Pollutant: NOx BACT Emission Limit: 0.50 lb/MM BTU of heat input (heat input) This limit is a thirty (30) day rolling average and includes periods of SSM
Authority for Requirement: USEPA PSD Permit as amended March 7, 1990 and subsequent dates. Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3
Pollutant: NOx Emission Limits: 260 ng/J (heat input) = 0.60 lb/MM BTU (heat input) The limit is a 30-day rolling average that includes periods of startup, shutdown, and malfunction Authority for Requirement: 40CFR60 Subpart A and Subpart Db USEPA PSD Permit as amended March 7, 1990 and subsequent dates.

Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3 567 IAC 23.1(2)"ccc"

Pollutant: NOx Emission Limit: 264.48 TPY Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

Pollutant: Volatile Organic Compunds (VOC) Emission Limits: 9.45 lb/hr, 41.27 TPY Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

 Pollutant: CO
 LAER Emission Limits: 117.7 ton/yr, 0.14 lb/MM BTU* (of heat input)
 *Standard is expressed as a one (1) hour average not including periods of SSM.
 Authority for Requirement: USEPA PSD Permit as amended March 7, 1990 and subsequent dates. Iowa Department of Natural Resources Construction Permit

Number 87-A-013-P3

Pollutant: CO Emission Limit: 144.34 TPY Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

Pollutant: Beryllium
 BACT Emission Limits: 0.00027 lb/hr, 0.0000014 lb/MM BTU* (heat input)

 *Standard is expressed as the average of three (3) runs and does not apply during periods of SSM.

 Authority for Requirement: USEPA PSD Permit as amended March 7, 1990 and subsequent dates.

 Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

Pollutant: Lead (Pb) Emission Limits: 0.13 lb/hr, 0.56 TPY Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

Pollutant: Fluorides (F) Emission Limits: 1.08 lb/hr Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3 Pollutant: Sulfuric Acid Mist (H2SO4) Emission Limits: 1.86 lb/hr Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

Pollutant: Total Reduced Sulfur Emission Limits: 2.47 lb/hr Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

NESHAP

This equipment is subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63 Subpart DDDDD].

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Operational Limits & Requirements

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

Operating Limits:

- A. This emission unit is limited to firing on coal, with gas or oil startup. "Coal" means any subbituminous coal supply, any bituminous coal supply, or blends composed of such coal supplies.
- B. If a turbine/generator is to be installed, the turbine shall be a conventional, unfired, steam turbine.
- C. This emission unit is subject to all applicable operating limits set forth in NSPS Subparts A (40 CFR §60.1 40 CFR §60.19) and Db (40 CFR §60.40b 40 CFR §60.49b).

Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

Operating Condition Monitoring:

All records shall be maintained on site for a period of not less than 5 years and shall be made available to representatives of this agency upon request.

- A. Record daily the amount of SO_2 and NO_x emitted in tons per day. Calculate and record twelve (12) month rolling totals.
- B. Quarterly written excess emission (opacity) reports shall be submitted to the Department per 40 CFR 60.7(c) and 40 CFR 60.49b(h). The quarterly report is based on the continuous emission monitoring records and is required even if the excess emissions were "zero."
- C. Quarterly written excess carbon monoxide emission reports shall be submitted and postmarked not more than thirty (30) days following the last monitoring day of the reported quarter. The quarterly report is based on the continuous emission monitoring records and is required even if the excess emissions were "zero."

- D. Hourly emission rate data shall be recorded and used by the owner or operator to calculate compliance with the applicable emission rates and percent reductions for the specified averaging times. After completion of the initial performance tests, compliance with the SO₂ and NO_x emission rate limitation and the SO₂ percent reduction requirements shall be calculated as the average of all valid hourly emission rate data and valid hourly SO₂ percent reduction data for the 30 previous boiler operating days during which each standard applies. The owner shall calculate a new 30-day average at the end of each boiler operating day. Compliance with the SO₂ standards shall be determined separately depending on the average inlet SO₂ rate to the boiler. SO₂ emission rate and percent reduction data collected under the two inlet SO₂ rate ranges shall not be intermixed except when determining compliance with the short term standards (i.e., 24-hour standard).
- E. The weight percent sulfur and gross heating value, as obtained through daily fuel sampling and analysis (FSA) of coal contained in the day bunker shall be used to calculate an equivalent inlet SO₂ rate using the following equation:

Equivalent Inlet SO₂ Rate = (% S / GHV) * K

Where: %S = Weight percent sulfur of coal contained in bunker GHV = Gross heating value of coal contained in bunker K = 20,000 (lb*BTUs)/(%*MMBTUs)

The facility shall use the equivalent SO_2 rate to calculate each hourly percent reduction during the boiler operating day.

- F. In order to determine continuous compliance with the Beryllium (Be) standard, an "as-fired" coal sample shall be taken semi-annually or whenever a new coal supply is burned in the boiler (whichever is more frequent), and shall be analyzed for Be content. The owner shall accomplish said sampling within one (1) week of the semi-annual deadline or change of coal supply. The results of the analysis shall be submitted to the PSD implementing agency within two (2) weeks of the date of collection of the sample. The sampling and analysis procedures after the initial verification of compliance shall be the same as performed on the sample collected during the initial Be-related stack testing of the unit unless a new sampling and analysis procedure is approved by the Department. The Department has approved Method D6357 as a method for determining Be content in coal. A "new coal supply" shall be defined as coal obtained from a different mine or supplier.
- G. All applicable recordkeeping set forth in NSPS Subparts A (40 CFR §60.1 40 CFR §60.19) and Db (40 CFR §60.40b 40 CFR §60.49b).

Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

Continuous Emission Monitoring:

In accordance with NSPS Subpart Db and 40 CFR §60.13, the facility shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system. The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 1 (PS1).

Compliance with the carbon monoxide emission limits of this permit shall be continuously demonstrated by the owner through the use of a continuous emission monitoring system (CEMS). Therefore, the facility shall install, calibrate, maintain, and operate a CEMS for measuring carbon monoxide emissions discharged to the atmosphere and record the output of the system. The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 4 (PS4).

Compliance with the sulfur dioxide (SO₂), nitrogen oxides (NO_x), and SO₂ percent reduction requirements of this permit shall be continuously demonstrated by the owner through the use of a CEMS. Therefore, the facility shall install, calibrate, maintain, audit, and operate a CEMS for measuring SO₂, NO_x and the appropriate diluent gas (oxygen or carbon dioxide) emissions discharged to the atmosphere and record the output of the system. The system shall be designed to meet the 40 CFR §60.13 requirements, the 40 CFR 60, Appendix B, Performance Specifications 2 and 3 (PS2 and PS3), and the 40 CFR Part 60 Appendix F requirements. The CEMS shall meet the requirements of 40 CFR §60.47b for monitoring of SO₂ emissions and 40 CFR §60.48b for monitoring of NO_x emissions.

Hourly parts-per-million data recorded by the pollutant CEMS shall be converted to lb-pollutant per million BTUs (lb/MMBTUs) heat input using the equations and methodology specified in 40 CFR 60, Appendix A, Method 19.

The owner shall successfully complete SO_2 and NO_x CEMS performance evaluations (including relative accuracy and calibration drift assessment) under the following two conditions: (1) firing a coal or blend of coals that results, or can reasonably be expected to result, in controlled emissions between 0.0 and 0.6 lb-SO₂/MMBTUs; and (2) firing a coal or blend of coals that results, or can reasonably be expected to result, in controlled emissions 0.60 or greater lb-SO₂/MMBTUs.

Successful performance tests in at least one of the above-specified emission ranges shall be completed prior to beginning the initial compliance demonstration required under Section 12 of Construction Permit Number 87-A-013-P3. The remaining performance evaluation may be run during any of the quarterly Appendix F audits, or at any other time, but must be completed no later than ninety (90) days after any fuel switch which results, or can reasonably be expected to result, in controlled SO₂ emissions in the range for which a successful performance evaluation has not previously been completed.

If requested by the Department, the owner/operator shall coordinate the quarterly cylinder gas audits with the Department to afford the Department the opportunity to observe these audits. The relative accuracy test audits shall be coordinated with the Department.

Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

Fuel Sampling and Analysis:

The owner or operator shall install, operate and maintain a fuel sampling and analysis (FSA) system to collect "as-fired" fuel data. The FSA system shall meet or exceed the design and performance specifications set forth in 40 CFR 60, Appendix A, Method 19 (incorporating by reference of ASTM method D2234-76, et al.). As specified by Method 19, at least a minimum number and weight of sample increments shall be collected at a location immediately preceding the day bunker (downstream of all blending operations), composited, and analyzed daily. Coal

analyses shall be conducted for weight percent sulfur (%S) and gross heat value (GHV, expressed in BTUs/lb-coal).

The owner or operator may develop an in-house coal analysis program or may send collected samples to a laboratory for analysis. Analytical results from an in-house program shall be available to the owner or operator within seventy-two (72) hours of the sample collection time. Analytical results from a contract laboratory shall be expedited to be made available as soon as practicable. To ensure that coal analyses are performed in accordance with ASTM methods, the permit-issuing agency will require the owner to conduct periodic analyses of quality assurance audit coal samples provided by EPA.

The "as-fired" fuel data will be used to determine the equivalent hourly average SO_2 inlet rate to the boiler, and will be used in conjunction with the SO_2 CEMS emission rate data to determine compliance with the SO_2 30-day rolling percent reduction limit. The "equivalent hourly average SO_2 inlet rate" means the sulfur input rate expressed in terms of "lbs SO_2 /MMBTUs heat input" based on the assumption of 100% conversion of sulfur to SO_2

Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 255 Stack Diameter (inches): 61.5 Stack Exhaust Flow Rate (scfm): 46,900 Stack Temperature (°F): 337 Discharge Style: Unobstructed Vertical Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Periodic Monitoring requirements for Opacity, SO2, NOx and CO shall be met by complying with the requirements of Continuing Emission Monitoring (CEM) listed above. Periodic Monitoring requirements for Beryllium(BE) is met by coal sampling as required under Operating Condition Monitoring F.

Stack testing:

Pollutant – PM (State Limit) One Stack Test to be completed by - No later than April 22, 2016 Test Method - 40 CFR 60, Appendix A, Method 5 40 CFR 51, Appendix M, Method 202 Authority for Requirement - 567 IAC 22.108(3)

Pollutant – PM (Federal Limit) One Stack Test to be completed by - No later than April 22, 2016 Test Method - 40 CFR 60, Appendix A, Method 5 40 CFR 51, Appendix M, Method 202 Authority for Requirement - 567 IAC 22.108(3)

Pollutant – PM10 One Stack Test to be completed by - No later than April 22, 2016 Test Method - 40 CFR 51, Appendix M, Method 201A with 202, or approved alternative Authority for Requirement - 567 IAC 22.108(3)

Pollutant – VOC One Stack Test to be completed by - No later than July 31, 2018 Test Method - 40 CFR 60, Appendix A, Method 25A Authority for Requirement - 567 IAC 22.108(3)

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

<u>Compliance Assurance Monitoring Plan</u>: Multi-bed Fluidized Combustion Main Boiler Baghouse

Emission Unit Information

Main Boiler Information

Emission Unit: Coal Fired Boiler (C05) Emission Control Technique: Baghouse Control Device Identification Number(s): CE C05 Emission Point Identification Number(s): EP C05 Applicable Requirement for C05

Pollutant: PM

Emission Limit: 0.04 lb/MM BTU of heat input Authority for Requirement: USEPA PSD Permit as amended March 7, 1990 and subsequent dates. Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

Emission Limit: 22 ng/J of heat input Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc"

Pollutant: PM/ PM10

Emission Limits: 4.42 lb/hr Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013-P3

Monitoring Approach

Indicators

Indicator #1: Opacity (Visible Emission)

Visible Emissions (opacity) was selected as a performance indicator because it is indicative of good operation and maintenance of the baghouse. When the baghouse is operating optimally, there will be little to no visible emissions from the exhaust. In general, an increase in visible emissions indicates reduced performance of the baghouse.

Indicator #2: Pressure Drop

Pressure range across the filter bags in an indicator of baghouse performance. A pressure change outside the indicator range indicates a decrease in baghouse performance and potentially indicates an increase in particulate emissions. A pressure gauge is installed to measure the differential pressure between the baghouse inlet and outlet, allowing representative data to be obtained.

Indicator Range

Indicator #1: Opacity (Visible Emission)

The boiler stack after the control device is monitored by a continuous opacity monitoring system (COMS). The Opacity indicator range is equal to or less than 10% opacity for a three hour average, rolled hourly.

Indicator #2: Pressure Drop

The pressure drop (inches of water) across the main boiler baghouse will be monitored daily. The normal operating range is one to ten inches of water.

Measurement Approach

Indicator #1: Opacity (Visible Emissions)

The opacity of the stack exhaust is monitored and recorded on a hourly basis using a COMS and data acquisition system. The averaging time for the indicator opacity reading is three hours, rolled hourly. The rolling three hour average shall be used to determine if the indicator opacity is exceeded.

Indicator #2: Pressure Drop

Each day the main boiler baghouse is in operation, the pressure level across the filter bags will be recorded to ensure the level is within the appropriate operating range. Records of pressure readings will be maintained for five years.

Performance Criteria

To ensure the data collected is representative, COMS and pressure drop readings will be taken when the equipment is operating. The COMS and pressure readings are logged by the computer system. The equipment will not be operating while corrective action is being performed.

Response to Excursion

Indicator #1: Opacity (Visible Emissions)

If the COMS detects an exceedance of the indicator opacity, corrective action will be taken within 8 hours and if corrective action cannot return the opacity below the indicator value, a planned shutdown of the main boiler will occur to perform maintenance on the boiler or baghouse. A deviation shall be reported in the semiannual compliance report.

Indicator #2: Pressure Drop

If an observed pressure drop across the filter bags is outside the appropriate operating range for more than five minutes, corrective action will be taken within 8 hours. A deviation shall be reported in the semiannual compliance report.

Operation and Maintenance Checks

In addition to the monitoring approach, operating and maintenance checks will be performed on a regular schedule. The baghouse hopper conveying system and pulse jet cleaning system shall be monitored for proper operation on a daily basis. The baghouse is dye tested and repairs are made during outages to maintain optimum efficiency. The bags are inspected for integrity at least one per year with documentation of bag replacement to include date, type of bag, and location of bag.

Emission Point ID Number: C06A – Fly Ash Transfer

Associated Equipment

Associated Emission Unit ID Numbers: C06 Emissions Control Equipment ID Number: C06A Emissions Control Equipment Description: Cyclone with fabric filter

Emission Unit vented through this Emission Point: C06 Emission Unit Description: Fly Ash Transfer Raw Material/Fuel: Fly Ash Rated Capacity: 2.5 Tons/hr

Applicable Requirements

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

Pollutant: Opacity Emission Limit: 0% Opacity Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-021-S1

Pollutant: PM Emission Limit: 0.02gr/dscf Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-021-S1

Pollutant: PM10 Emission Limit: 0.26 lb/hr Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-021-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 37.2 Stack Diameter (inches): 7 Stack Exhaust Flow Rate (scfm): 1540 Stack Temperature (°F): 165 Discharge Style: Obstructed Vertical Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-021-S1 The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Operational Limits & Requirements

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

This emission point shall not be operated at the same time as EP C06B.

The owner or operator shall record the time and date that emissions are switched between EP C06A and EP C06B.

Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-021-S1

Monitoring Requirements

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

EP C06A shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🔀

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: C06B – Fly Ash Transfer

Associated Equipment

Associated Emission Unit ID Numbers: C06 Emissions Control Equipment ID Number: C06B Emissions Control Equipment Description: Cyclone with fabric filter

Emission Unit vented through this Emission Point: C06 Emission Unit Description: Fly Ash Transfer Raw Material/Fuel: Fly Ash Rated Capacity: 2.5 Tons/hr

Applicable Requirements

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

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

Pollutant: Opacity Emission Limit: 0% Opacity Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 09-A-413

Pollutant: PM Emission Limit: 0.02gr/dscf Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 09-A-413

Pollutant: PM10 Emission Limit: 0.26 lb/hr Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 09-A-413

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 37.2 Stack Diameter (inches): 7 Stack Exhaust Flow Rate (scfm): 1540 Stack Temperature (°F): 165 Discharge Style: Obstructed Vertical Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 09-A-413 The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Operational Limits & Requirements

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

This emission point shall not be operated at the same time as EP C06A.

The owner or operator shall record the time and date that emissions are switched between EP C06A and EP C06B.

Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 09-A-413

Monitoring Requirements

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

EP C06A shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observet, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🔀

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

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

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

Emission Point ID Number: C07 – Fly-ash Silo

Associated Equipment

Associated Emission Unit ID Number: C07 Emissions Control Equipment ID Number: C07 Control Equipment Description: Flex-kleen Baghouse Model 58-BVB-C9-IIG

Emission Unit vented through this Emission Point: C07 Emission Unit Description: Fly-ash Storage Raw Material/Fuel: Fly Ash Rated Capacity: 2.52 tons/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: 0% Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-022-S90

Pollutant: PM Emission Limit: 0.08 lb/hr, 0.35 TPY Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-022-S90

Monitoring Requirements

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

EP C07 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where

weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🔀

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

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

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

Emission Point ID Number: C09 - Primary Standby Boiler C09A - Primary Standby Boiler (Bypass)

Associated Equipment

Associated Emission Unit ID Numbers: C09

ЕР	EU	Emission Unit Description	Raw Material	Rated Capacity
C09, C09A	C09	Primary standby boiler	Natural gas combustion	175 MM BTU
C09, C09A	C09	Primary standby boiler	No. 2 fuel oil combustion	1,277 gal/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.) The emissions from this emission point shall not exceed the levels specified below. Pollutant: Opacity Emission Limit: <20% Authority for Requirement: State of Iowa Construction Permit Number 88-A-203-S3 State of Iowa Construction Permit Number 09-A-414 567 IAC 23.3(2) d Polk Board of Health Rules and Regulations Chapter V, Section 5-9 Pollutant: PM Emission Limits: 47.6 Ton/yr, 0.01 gr/dscf Authority for Requirement: State of Iowa Construction Permit Number 88-A-203-S3 State of Iowa Construction Permit Number 09-A-414 567 IAC 23.3(2) "b" Pollutant: PM10 Emission Limits: 1.3 lb/hr (when burning natural gas) 2.94 lb/hr (when burning No. 2 fuel oil) Authority for Requirement: State of Iowa Construction Permit Number 88-A-203-S3 State of Iowa Construction Permit Number 09-A-414 Pollutant: SO2 Emission Limits: 0.1 lb/hr, 349.1 Ton/yr (when burning natural gas) 9.07 lb/hr, 349.1 Ton/yr (when combusting No. 2 fuel oil) Authority for Requirement: State of Iowa Construction Permit Number 88-A-203-S3 State of Iowa Construction Permit Number 09-A-414

Pollutant: NOx Emission Limit: 32.6 lb/hr, 215.7 Ton/yr (when burning natural gas) 25.55 lb/hr, 215.7 Ton/yr (when burning No. 2 fuel oil) Authority for Requirement: State of Iowa Construction Permit Number 88-A-203-S3 State of Iowa Construction Permit Number 09-A-414

Pollutant: CO Emission Limit: 19.5 Ton/yr Authority for Requirement: State of Iowa Construction Permit Number 88-A-203-S3 State of Iowa Construction Permit Number 09-A-414

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

(For EP C09 and EP C09A) Stack Height (feet): 44.8 Stack Diameter (inches): 72 Stack Exhaust Flow Rate (scfm): 50,000 Stack Temperature (°F): 500 Discharge Style: Obstructed Unobstructed Vertical Authority for Requirement: State of Iowa Construction Permit Number 88-A-203-S3 State of Iowa Construction Permit Number 09-A-414

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

<u>NESHAP</u>

This equipment is subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63 Subpart DDDDD].

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Operational Limits & Requirements

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

The owner or operator shall combust only natural gas or fuel oil with a sulfur content of 0.05% or less by weight in the standby boiler, EU C09.

All fuel combusted must be continuously metered and logged on a daily basis.

The standby boiler, EU C09, shall combust only natural gas when operated simultaneously with the fluidized bed steam generator.

Emissions of carbon monoxide shall be determined per the following equation: Tons of carbon monoxide per "unit" of time = (35x + 5y)/2000Where x = mmft³ natural gas/"unit" of time y = mgal fuel oil/"unit time"

The owner or operator shall demonstrate compliance with the sulfur content of any fuel oil combusted either by fuel oil supplier certification or by testing each delivered shipment for sulfur by approved ASTM method.

Determination of the TPY limits shall be made by substituting consumption of natural gas and fuel oil into the above equation with the "unit" of time equal to 1 (one) year. It is recommended that the totals "to date" be checked monthly and even daily as the end of the year nears.

Authority for Requirement: State of Iowa Construction Permit Number 88-A-203-S3 State of Iowa Construction Permit Number 09-A-414

Monitoring Requirements

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

EP C09 & C09a shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is burning Number 2 or Number 6 fuel oil and operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observation and corrective action will be taken as soon as possible, but no later than eight hours from the observation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation	& Maintenance Plan	Required ?	Yes	No
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Facility Maintained Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🖂

Emission Point ID Number: C012 – Limited Use Generator

Emission Unit vented through this Emission Point: C012 Emission Unit Description: Caterpillar Model 3412 Limited Use Generator Raw Material/Fuel: Number 2 Fuel Oil Rated Capacity: 600 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: <20 % Authority for Requirement: Polk County Construction Permit Number 1115 Modified

Pollutant: PM/PM10 Emission Limits: 0.56 lb/hr, 0.03 Ton/yr, 0.1 gr/dscf Authority for Requirement: Polk County Construction Permit Number 1115 Modified 567 IAC 23.3 (2) "b"

Pollutant: SO2 Emission Limits: 0.32 lb/hr, 0.02 Ton/yr, 0.5 lb/MM BTU Authority for Requirement: Polk County Construction Permit Number 1115 Modified 567 IAC 23.3 (3)"b"

Pollutant: NOx Emission Limit: 19.30 lb/hr, 0.97 Ton/yr Authority for Requirement: Polk County Construction Permit Number 1115 Modified

Pollutant: VOC Emission Limit: 0.57 lb/hr, 0.03 Ton/yr Authority for Requirement: Polk County Construction Permit Number 1115 Modified

Pollutant: CO Emission Limit: 4.42 lb/hr, 0.22 Ton/yr Authority for Requirement: Polk County Construction Permit Number 1115 Modified

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 21 Stack Diameter (inches): 10 Stack Exhaust Flow Rate (scfm): 5,018 Stack Temperature (°F): 907 Discharge Style: Unobstructed Vertical Authority for Requirement: Polk County Construction Permit Number 1115 Modified The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

NESHAP

This equipment is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ]. Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

Operational Limits & Requirements

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

Work Practice Standards, Reporting & Recordkeeping:

Per § 63.6590 (b)(3)(iv) as an existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, emission unit C012 does not have to meet the requirements of subpart ZZZZ or subpart A, including initial notification requirements.

The generator shall be operated in a manner consistent with the definition of a limited use stationary RICE as defined by §63.6675.

Operation shall be limited to one hundred (100) hours per twelve (12) month period rolled and totaled monthly.

Monthly readings shall be taken and logged on site. Logs shall be kept on site for a period of 5 years. Logs shall be made available to representatives of Polk County AQD upon request.

Fuel sulfur content shall not exceed 0.05% by weight. Fuel supplier certification shall be obtained and maintained on site for each purchase for a period of five years and shall be made available to representatives of this department upon request.

Authority for Requirement: Polk County Construction Permit Number 1115 Modified

Monitoring Requirements

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

EP C012 shall be visually checked for observable emissions once every month by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the

observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🔀

Emission Point ID Number: C013 – Nebraska Boiler

Emission Unit vented through this Emission Point: C013 Emission Unit Description: Nebraska Model NS-E-58 Boiler Raw Material/Fuel: Natural Gas Rated Capacity: 61.5 MM BTU

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: <20 % Authority for Requirement: Polk County Construction Permit Number 2530

Pollutant: PM/PM10 Emission Limits: 0.46 lb/hr, 2.00 Ton/yr, 0.10 gr/dscf Authority for Requirement: Polk County Construction Permit Number 2530 567 IAC 23.3 (2) "b"

Pollutant: SO2 Emission Limits: 0.04 lb/hr, 0.16 Ton/yr, 500 ppm Authority for Requirement: Polk County Construction Permit Number 2530 567 IAC 23.3 (3)"e"

Pollutant: NOx Emission Limit: 6.00 lb/hr, 26.28 Ton/yr Authority for Requirement: Polk County Construction Permit Number 2530

Pollutant: VOC Emission Limit: 0.33 lb/hr, 1.45 Ton/yr Authority for Requirement: Polk County Construction Permit Number 2530

Pollutant: CO Emission Limit: 5.04 lb/hr, 22.08 Ton/yr Authority for Requirement: Polk County Construction Permit Number 2530

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 40 Stack Diameter (inches): 41 Stack Exhaust Flow Rate (scfm): 9,660 Stack Temperature (°F): 420 Discharge Style: Unobstructed Vertical Authority for Requirement: Polk County Construction Permit Number 2530 The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

NESHAP

This equipment is subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63 Subpart DDDDD].

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Monitoring Requirements

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

EP C013 shall be visually checked for observable emissions once every month by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observet, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🖂

Emission Point ID Number: GP02 – 2 - 500,000 Bushel Bean Storage Tanks

Associated Equipment

Associated Emission Unit ID Numbers: GP02 Emissions Control Equipment ID Number: N/A Emissions Control Equipment Description: N/A

Emission Unit vented through this Emission Point: GP02 Emission Unit Description: 2 - 500,000 bushel bean storage tanks Raw Material/Fuel: Soybeans Rated Capacity: 960 Tons/hour

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: <20% Authority for Requirement: Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM Emission Limit: 0.10 gr/scf Authority for Requirement: 567 IAC 23.4(7) Standards for Grain Handling and Processing Plants. Polk County Board of Health Rules and Regulations Chapter V, Section 5-16

Monitoring Requirements

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

EP GP02 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observet from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data

observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required?	Yes	No 🖂
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Facility Maintained Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🔀

Emission Point ID Number: GP04A – Conveying to Processing

Associated Equipment

Associated Emission Unit ID Numbers: GP04 Emissions Control Equipment ID Number: GP04A Emissions Control Equipment Description: MAC Elevator Baghouse

Emission Unit vented through this Emission Point: GP04 Emission Unit Description: Soybean conveying Raw Material/Fuel: Soybeans Rated Capacity: 540 Tons/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: <20% Authority for Requirement: Polk County Construction Permit Number 1892 Modified #2.

Pollutant: PM/PM10 Emission Limit: 0.50 lb/hr, 2.19 Ton/yr, 0.10 gr/scf Authority for Requirement: Polk County Construction Permit Number 1892 Modified #2.

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 22
Stack Diameter (inches): 34
Stack Exhaust Flow Rate (scfm): 21,600
Stack Temperature (°F): Ambient
Discharge Style: Unobstructed Vertical
Authority for Requirement: Polk County Construction Permit Number 1892 Modified #2.

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Polk County AQD recognizes that the temperature and flowrate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Polk County AQD and obtain a permit amendment, if required.

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Operational Limits & Requirements

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

Work Practice Standards, Reporting & Recordkeeping:

The facility shall not process more than 1,697,250 tons of soybeans per 12-month rolling period, rolled monthly.

The facility shall record and maintain daily records of the number of tons of soybeans processed.

All records shall be maintained on site for a period of not less than 5 years and shall be made available to representatives of this agency upon request.

Authority for Requirement: Polk County Construction Permit Number 1892 Modified #2.

Monitoring Requirements

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

EP GP04A shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observet, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🔀

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

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

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

Emission Point ID Number: GP05A – Escher Wyss Conditioning/Dehulling

Associated Equipment

Associated Emission Unit ID Number: GP05 Emissions Control Equipment ID Number: GP05A Emissions Control Equipment Description: Pneumafil Model RAF-II 11.5-320-12 Baghouse

Emission Unit vented through this Emission Point: GP05 Emission Unit Description: Escher Wyss Bean Conditioning and Dehulling Raw Material/Fuel: Soybeans Rated Capacity: 250 Tons/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: <20% Authority for Requirement: Polk County Construction Permit Number1407 Modified #3 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/ PM10 Emission Limits: 0.38 lb/hr, 1.66 Ton/yr, 0.10 gr/dscf Authority for Requirement: Polk County Construction Permit Number1407 Modified #3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 29.25 Stack Diameter (inches): 46 Stack Exhaust Flow Rate (scfm): 37,000 Stack Temperature (°F): 130 Discharge Style: Vertical Authority for Requirement: Polk County Construction Permit Number 1407 Modified #3.

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Polk County AQD recognizes that the temperature and flowrate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the

values stated above, the owner/operator must notify the Polk County AQD and obtain a permit amendment, if required.

Monitoring Requirements

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

EP GP05A shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observet, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Authority for Requirement: Polk County Construction Permit Number1407 Modified #3.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🔀

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

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

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

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Emission Point ID Number: GP06A – Flaking Roll Aspiration

Associated Equipment

Associated Emission Unit ID Number: GP06A Emissions Control Equipment ID Number: GP06B Emissions Control Equipment Description: Crown Model CHV 93" Cyclone

Emission Unit vented through this Emission Point: GP06A Emission Unit Description: Flaking Roll Aspiration System Raw Material/Fuel: Soybeans Rated Capacity: 210 Tons/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: 20% Authority for Requirement: Polk County Construction Permit Number 1618 Modified #5.

Pollutant: PM Emission Limits: 8.50 lb/hr, 37.23 Ton/yr, 0.10 gr/scf Authority for Requirement: Polk County Construction Permit Number 1618 Modified #5.

Pollutant: PM10 Emission Limits: 1.51 lb/hr, 6.61 Ton/yr, 0.10 gr/scf Authority for Requirement: Polk County Construction Permit Number 1618 Modified #5.

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 97 Stack Diameter (inches): 33 Stack Exhaust Flow Rate (scfm): 31,000 Stack Temperature (°F): 160 Discharge Style: Unobstructed Vertical

Authority for Requirement: Polk County Air Quality Construction Permit Number 1618 Modified #5 The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Polk County AQD recognizes that the temperature and flowrate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Polk County AQD and obtain a permit amendment, if required.

Monitoring Requirements

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

EP GP06A shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observet, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Stack Testing:

Pollutant –PM10 Stack Test to be completed by – April 22, 2016 Test Method: Conducted according to 40 CFR 51, Appendix M, 201A with 202 Authority for Requirement – 567 IAC 22.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🗌 No 🖂

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🛛 No 🗌

<u>Compliance Assurance Monitoring Plan:</u> Flaking Roll Aspiration System Cyclone

Emission Unit Information

Flaking Information

Emission Unit: Flaking (GP06) Emission Control Technique: Cyclone Control Device Identification Number(s): CE GP06B Emission Point Identification Number(s): EP GP06A

Emissions generated by the flakers are controlled by cyclone CE GP06B. Emission point EP GP06A is the exhaust for cyclone CE GP06B.

Applicable Requirement for GP06A

Pollutant: PM Emission Limits: 8.50 lb/hr, 37.23 Ton/yr, 0.10 gr/scf Authority for Requirement: Polk County Construction Permit Number 1618 Modified #5.

Pollutant: PM10 Emission Limits: 1.51 lb/hr, 6.61 Ton/yr, 0.10 gr/scf Authority for Requirement: Polk County Construction Permit Number 1618 Modified #5.

Monitoring Approach

Indicators

Indicator #1: Opacity (Visible Emission)

Visible Emissions (opacity) was selected as a performance indicator because it is indicative of good operation and maintenance of the cyclone. When the cyclone is operating optimally, there will be little to no visible emissions from the exhaust. In general, an increase in visible emissions indicates reduced performance of the cyclone.

Indicator #2: Physical Inspection

Implementation of a cyclone operating and maintenance (O&M) program provides assurance that the cyclone is in good repair and operating properly.

Indicator Range

Indicator #1: Opacity (Visible Emission)

The indicator range is visible emissions or no visible emissions.

Indicator #2: Physical Inspection – Not applicable

Measurement Approach

Indicator #1: Opacity (Visible Emissions)

Visible emission observations will be performed daily on the flaking cyclone. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from observation of visible emissions. The observation of visible emissions is a deviation from the indicator range. Records of the daily visible emission checks will be maintained for five years.

Indicator #2: Physical Inspection

Maintenance is performed on an as needed basis. Annual inspections of the structural components including the cyclone ductwork and hoods are performed. Servicing of the unit and its components is performed as needed or during shutdown periods. Failure to perform the inspection and maintenance is a deviation from the indicator range.Records documenting maintenance activities will be maintained for five years.

Performance Criteria

To ensure the data collected is representative, visible emission observations and physical inspection will be taken when the equipment is operating. The person performing the observations and readings will be qualified to perform such duties and the individual performing the readings, when required, will have a valid certification. The equipment will not be operating while corrective action is being performed.

Response to Excursion

Indicator #1: Opacity (Visible Emissions)

If visible emissions are observed during a daily visible emissions check, corrective action will be taken as soon as possible, but no later than eight hours from observation of visible emissions.

Indicator #2: Physical Inspection

Maintenance is performed on an as needed basis. Annual inspections of the structural components including the cyclone ductwork and hoods are performed. Servicing of the unit and its components is performed as needed or during shutdown periods.

Emission Point ID Number: GP07 – Extractor Conveyor System

Emission Unit vented through this Emission Point: GP07 Emission Unit Description: Extractor Conveyor System Raw Material/Fuel: Flakes Rated Capacity: 250 Tons/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: <20% Authority for Requirement: Polk County Construction Permit Number 0103 Modified #2 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/PM10 Emission Limit: 0.343 lb/hr, 1.502 Ton/yr, 0.10 gr/scf Authority for Requirement: Polk County Construction Permit Number 0103 Modified #2 Polk County Board of Health Rules and Regulations Chapter V, Section 5-16

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 65.5
Stack Diameter (inches): 10
Stack Exhaust Flow Rate (scfm): 1,440
Stack Temperature (°F): 100
Discharge Style: Horizontal
Authority for Requirement: Polk County Air Quality Construction Permit Number 0103 Modified #2.

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Polk County AQD recognizes that the temperature and flowrate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Polk County AQD and obtain a permit amendment, if required.

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Monitoring Requirements

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

EP GP07 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

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: GP09A – Solvent Bubble (includes Extraction/Distillation Process, DTDC-Desolvtizer/Toaster, and Hexane Tanks)

Associated Equipment

Associated Emission Unit ID Numbers: GP09, GP014, MP01 Emissions Control Equipment ID Number: GP09A Emissions Control Equipment Description: Mineral Oil Scrubber

ЕР	EU	Emission Unit Description	Raw Material	Rated Capacity
GP09A	GP09	Extraction/Distillation Process	Hexane/Meal	230 Tons/hr
GP09A	GP014	Hexane Tanks	Hexane	2 Tanks - 30,000 gallons each
GP09A	MP01	Desolventizer/Toaster (DTDC)	Meal	250 Tons/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: <20% Authority for Requirement: Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM Emission Limits: 0.1 gr/scf Authority for Requirement: State of Iowa Construction Permit Number 07-A-1078P 567 IAC 23.3(2)"a"

Pollutant: PM/PM₁₀ Emission Limits: 0.76 lb/hr, 3.34 Ton/yr, 0.1 gr/scf Authority for Requirement: State of Iowa Construction Permit Number 07-A-1078P 567 IAC 23.3(2)"a" Pollutant: VOC BACT Emission Limits: 804 Tons/yr, 0.1712 gallons/ton Total solvent loss for the entire facility including startups, shutdowns and malfuctions. Standard is calculated for each 12-month rolling period. Authority for Requirement: State of Iowa Construction Permit Number 07-A-1078P

Pollutant: Total HAP Emission Limits: 0.2 gallon/ton Solvent Loss Factor to be used to determine compliance according to 40 CFR 63.2840 Equation 2. Limit covers entire extraction process. Authority for Requirement: State of Iowa Construction Permit Number 07-A-1078P

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 21 Stack Diameter (inches): 11 Stack Exhaust Flow Rate (acfm): 1,500 Stack Temperature (°F): 100 Discharge Style: Horizontal Authority for Requirement: State of Iowa Construction Permit Number 07-A-1078P

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

NESHAP

This unit is subject to 40 CFR Part 63 Subpart GGGG - National Emission Standards for Solvent Extraction for Vegetable Oil Production and Subpart A – General Provisions.

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

Operational Limits & Requirements

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

Work Practice Standards, Reporting & Recordkeeping:

The overall solvent loss ratio for the entire facility shall not exceed 0.1712 gallons of solvent per ton of soybeans processed for any 12-month rolling period.

This facility shall develop and implement a written plan for demonstrating compliance. This plan shall meet the requirements of 40 CFR 63.2851

This facility shall develop and implement a written startup, shutdown and malfunction plan. This plan shall meet the requirements of 40 CFR 63.2852.

The amount of soybeans processed at this facility shall not exceed 1,698,000 tons per 12month rolling period.

This facility shall record the amount of solvent loss, in gallons. Calculate and record monthly an 12-month rolling totals. Solvent loss shall be determined according to 40 CFR 63.2853. For the purposes of determining compliance with the BACT limit of 0.1712 gal/ton, solvent losses from startups, shutdowns and malfunctions shall be included.

This facility shall record the amount of soybeans processed, in tons. Calculate and record monthly and 12-month rolling totals. The quantity of soybeans processed shall be determined according to 40 CFR 63.2855.

This facility shall calculate the ratio of solvent loss to soybeans processed. Calculate and record the 12-month rolling value of this ratio. The solvent loss ration be calculated as the ratio of solvent loss (40 CFR 63.2853) to grain processed (40 CFR 63.2855).

This facility shall submit all notifications required by NESHAP subpart GGGG according to 40 CFR 63.2860.

This facility shall submit all reports required by NESHAP subpart GGGG according to 40 CFR 63.2861.

This facility shall keep all records required by NESHAP subpart GGGG according to 40 CFR 63.2862.

Authority for Requirement: State of Iowa Construction Permit Number 07-A-1078P 40 CFR 63 subpart GGGG

Monitoring Requirements

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

EP GP09A shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this

would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

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

<u>Compliance Assurance Monitoring Plan</u>: Solvent Bubble with Mineral Oil Scrubber

Emission Unit Information

Solvent Bubble

Emission Units: Extraction/Distillation Process (GP09), Hexane Tanks (GP14), DTDC – Desolventizer/Toaster (MP01) Emission Control Technique: Mineral Oil Scrubber Control Device Identification Number(s): CE GP09A Emission Point Identification Number(s): EP GP09A

Applicable Requirement for GP09A

Pollutant: VOC

Emission Limits: 804 Tons VOC/yr, 0.1712 gallons solvent/ton of grain processed Total solvent loss is for the entire facility, including startups, shutdowns and malfuctions. Standard is calculated for each 12-month rolling period. Authority for Requirement: State of Iowa Construction Permit Number 07-A-1078P

Monitoring Approach

Indicators

Indicator #1: Calculated 12-month rolling total solvent losses and solvent loss ratios

Calculations of solvent loss and grain processed, with monthly accounting adjustments, are described as a portion of the NESHAP Subpart GGGG Compliance Plan for the HAP n-Hexane, and are used monthly to directly verify compliance with the 12-month rolling VOC limits.

Indicator #2: Mineral Oil Scrubber Temperature and Flow Rate

The scrubber's mineral oil flow rate and temperature were selected as the performance indicators as they are indicative of operation of the scrubber in a manner necessary to maximize collection and reuse of hexane and minimize emissions. An excursion of these indicators out of the optimal operating range indicates a possibility of reduced performance of the scrubber.

Indicator Range

Indicator #1: Calculated 12-month rolling total solvent losses and solvent loss ratios

Calculated monthly for compliance with the BACT limits of 804 tons VOC/year and 0.1712 gallons solvent/ton of grain processed. Calculations greater than the limits is an exceedance

Indicator #2: Mineral Oil Scrubber Temperature and Flow Rate

Monitoring the mineral oil flow rate and temperature will serve to alert the facility in circumstances when the mineral oil scrubber experiences short-term excursions. Any recorded flow rate or temperature outside of the indicator range during normal operations will signify an excursion. Normal operations do not include periods of startup or shutdown of the mineral oil system. The indicator levels for the scrubber are a mineral oil flow rate not less than 10 gallons per minute into the absorber and a mineral oil temperature not less than 180 degrees F into the stripper.

Measurement Approach

Indicator #1: Calculated 12-month rolling total solvent losses and solvent loss ratios

Solvent inventory is determined daily during normal operation of the process. Records of solvent deliveries are maintained. The amount of grain processed is estimated daily and adjusted monthly according to established accounting practices. Calculations demonstrating compliance with the VOC limits are done monthly.

Indicator #2: Mineral Oil Scrubber Temperature and Flow Rate

Oil flow entering the absorber shall be measured for flow rate and temperature shall be measured in the oil entering the stripper. The mineral oil flow rate and temperature sensors provide real-time readings which are recorded a minimum of once per day when the facility's emission unit is in operation.

Performance Criteria

The mineral oil scrubber is designed to operate at maximum control efficiency at specific mineral oil flow rate and temperature ranges. If the flow rate or temperature has drifted out of the optimal efficiency range, this is an indication of the potential for increased hexane emissions. Facility hexane losses are representative of the scrubber's operation.

Response to Excursion

Indicator #1: Calculated 12-month rolling total solvent losses and solvent loss ratios

12-month rolling total hexane emissions are used as long-term performance indicator and evaluation and corrective action regarding operating practices and conditions are an ongoing process. Calculated results greater than the permitted limits is an exceedance.

Indicator #2: Mineral Oil Scrubber Temperature and Flow Rate

When an excursion occurs, corrective action will be initiated within 8 hours, beginning with an evaluation of the occurrence to determine the action required. After any necessary corrective action has been taken, a follow-up check will be performed to insure that the indicator is within the indicator range.

Emission Point ID Number: GP013 – Emergency Lighting Generator

Emission Unit vented through this Emission Point: GP013 Emission Unit Description: Emergency Generator Raw Material/Fuel: Natural Gas Rated Capacity: 0.32 MMBTU/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: <20% Authority for Requirement: Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM Emission Limit: 0.1 gr/dscf Authority for Requirement: 567 IAC 23.3 (2) "a"

Pollutant: SO2 Emission Limit: 500 ppmv Authority for Requirement: 567 IAC 23.3 (3)"e"

NESHAP

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

Compliance Date

Per 63.6595(a)(1) you must comply with the provisions of subpart ZZZZ that are applicable by October 19, 2013.

Operation and Maintenance Requirements 40 CFR 63.6602, 63.6625, 63.6640 and Tables 2c and 6 to Subpart ZZZZ

- 1. Change oil and filter every 500 hours of operation or annually, whichever comes first. (See 63.6625(j) for the oil analysis option to extend time frame of requirements.)
- 2. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
- 3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

- 4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- 5. Install a non-resettable hour meter if one is not already installed.
- 6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

Operating Limits 40 CFR 63.6640(f)

- 1. Any operation other than emergency operation, maintenance and testing, emergency demand response 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, emergency demand response and periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. 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 and emergency demand response. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, 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 nonresettable hour meter. Document how many hours are spend for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

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

- 1. An initial notification is not required per 40 CFR 63.6645(a)(5).
- 2. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2c. (See Footnote 1 of Table 2c for more information.)
- 3. If you own or operate an emergency stationary RICE with a site rating of more than 100 bhp that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), you must submit an annual report. See 40 CFR 63.6650(h) for additional 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 🔀

Emission Point ID Number: GP015A Prep Building Central Vacuum Cleaning System

Associated Equipment

Associated Emission Unit ID Numbers: GP015A Emissions Control Equipment ID Number: GP015A Emissions Control Equipment Description: Smoot Prep Vacuum

Emission Unit vented through this Emission Point: GP015A Prep Vacuum System Emission Unit Description: Prep Vacuum Cleaning System Raw Material/Fuel: Soybean dust Rated Capacity: 2500 lb/hr (engineering estimate)

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: <20% Authority for Requirement: Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/PM10 Emission Limit: 0.043 lb/hr, 0.19 Ton/yr, 0.01 gr/dscf Authority for Requirement: Polk County Construction Permit Number 0092 Modified

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 39.7 Minimum Stack Diameter (inches): 5 Stack Exhaust Flow Rate (acfm): 500 Stack Temperature (°F): Ambient Discharge Style: Horizontal Authority for Requirement: Polk County Construction Permit Number 0092 Modified

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

EP GP015A shall be visually checked for observable emissions once every month by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation	n & Maintenance Plan Required?	Yes 🗌 No 🔀	
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Facility Maintained Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🔀

Emission Point ID Number: GP016 Soybean Heater

Associated Equipment

Associated Emission Unit ID Numbers: GP016 Emissions Control Equipment ID Number: GP016A Emissions Control Equipment Description: Pneumafil Model RAF-II 11.5-320-12 Baghouse

Emission Unit vented through this Emission Point: GP016 Emission Unit Description: Crown Model VSC130 Soybean Heater Raw Material/Fuel: Soybeans Rated Capacity: 250 Tons/hour

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: <20% Authority for Requirement: Polk County Construction Permit Number 2343 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/PM10 Emission Limit: 0.25 lb/hr, 0.86 Ton/yr, 0.10 gr/dscf Authority for Requirement: Polk County Construction Permit Number 2343

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 72.3
Stack Diameter (inches): 30
Stack Exhaust Flow Rate (acfm): 28,000
Stack Temperature (°F): 140
Discharge Style: Unobstructed Vertical
Authority for Requirement: Polk County Construction Permit Number 0092 Modified

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

EP GP016 shall be visually checked for observable emissions once every month by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🔀

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

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

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

Emission Point ID Number: GP018 – Emergency Fire Pump

Emission Unit vented through this Emission Point: GP018 Emission Unit Description: Emergency Fire Pump at Extraction Plant Raw Material/Fuel: Diesel Rated Capacity: 302 hp/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: <20% Authority for Requirement: Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM Emission Limit: 0.1 gr/dscf Authority for Requirement: 567 IAC 23.3 (2) "a"

Pollutant: SO2 Emission Limit: 0.5 lb/MM BTU Authority for Requirement: 567 IAC 23.3 (3)"b"

NESHAP

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

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

Fuel Requirements

No requirements except (beginning January 1, 2015) if you own or operate an existing emergency compression ignition stationary engine with a site rating of more than 100 bhp and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. Those requirements include a maximum sulfur content of 15 ppm (0.0015%) by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR 63.6604(b)

Operation and Maintenance Requirements 40 CFR 63.6602, 63.6625, 63.6640 and Tables 2c and 6 to Subpart ZZZZ

- 1. Change oil and filter every 500 hours of operation or annually, whichever comes first. (See 63.6625(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, emergency demand response 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, emergency demand response and periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. 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 and emergency demand response. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, 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

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

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

- 4. An initial notification is not required per 40 CFR 63.6645(a)(5).
- 5. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2c. (See Footnote 1 of Table 2c for more information.)
- 6. If you own or operate an emergency stationary RICE with a site rating of more than 100 bhp that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), you must submit an annual report. See 40 CFR 63.6650(h) for additional information.

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

Emission Point ID Number: HR01A – Secondary Aspiration/Hull Gravity Tables, Daybin/Conveying to Aspirator/Whole Bean Aspiration

Associated Equipment

Associated Emission Unit ID Numbers: GP011, HR01A Emissions Control Equipment ID Number: HR01A Emissions Control Equipment Description: Pneumafil Model 13.5x460x10 Baghouse

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
HR01A	GP011	Daybin/Conveying to Aspirator/Whole Bean Aspiration	Soybeans	250 Tons/hr
HR01A	HR01A	Secondary Aspiration, Hull Gravity Tables	Soybeans	250 Tons/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: <20% Authority for Requirement: Polk County Construction Permit Number 2531 Polk County Rules and Regulations Chapter V Section 5-9

Pollutant: PM/PM10 Emission Limit: 0.75 lb/hr, 3.29 Ton/yr, 0.10 gr/dscf Authority for Requirement: Polk County Construction Permit Number 2531 Polk County Board of Health Rules and Regulations Chapter V, Section 5-16

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 85 Stack Diameter (inches): 48 Stack Exhaust Flow Rate (acfm): 40,000 Stack Temperature (°F): 80 Discharge Style: Unobstructed Vertical Authority for Requirement: Polk County Construction Permit Number 2531 The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

EP HR01A shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observet, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🔀

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

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

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

Emission Point ID Number: HR02A – Hull Grinding

Associated Equipment

Associated Emission Unit ID Numbers: HR02A, MP04 Emissions Control Equipment ID Number: HR02A Emissions Control Equipment Description: Donaldson Model 124RFW8 Baghouse

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
HR02A	HR02A	Hull Grinding	Hulls	22 Tons/hr
HR02A	MP04	Flowability Agent Silo	Flowability Agent	25 Tons/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: <20% Authority for Requirement: Polk County Construction Permit Number 0100 Modified #5 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/PM10/PM2.5 Emission Limit: 0.53 lb/hr, 2.32 Ton/yr, 0.10 gr/scf Authority for Requirement: Polk County Construction Permit Number 0100 Modified #5 Polk County Board of Health Rules and Regulations Chapter V, Section 5-16

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 38.9
Stack Diameter (inches): 30
Stack Exhaust Flow Rate (acfm): 12,300
Stack Temperature (°F): Ambient
Discharge Style: Unobstructed Vertical
Authority for Requirement: Polk County Construction Permit Number 0100 Modified #5

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

EP HR02A shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observet, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🔀

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

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

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

Emission Point ID Number: HR03 – Pellet Cooler

Associated Equipment

Associated Emission Unit ID Numbers: HR03 Emissions Control Equipment ID Number: HR03 Emissions Control Equipment Description: Carter Day Cyclone Model NumberHV74

Emission Unit vented through this Emission Point: HR03 Emission Unit Description: Pellet Cooler Raw Material/Fuel: Hulls Rated Capacity: 11 Tons/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: <20% Authority for Requirement: State of Iowa Construction Permit 88-A-084-S1 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM Emission Limits: 0.01 gr/dscf Authority for Requirement: State of Iowa Construction Permit 88-A-084-S1

Pollutant: PM10 Emission Limits: 0.30 lb/hr Authority for Requirement: State of Iowa Construction Permit 88-A-084-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 18.8 Stack Diameter (inches): 24 Stack Exhaust Flow Rate (acfm): 13,000 Stack Temperature (°F): Ambient Discharge Style: Unobstructed Vertical Authority for Requirement: State of Iowa Construction Permit Number 88-A-084-S1 The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Operational Limits & Requirements

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

The owner or operator shall inspect and maintain the control equipment according to manufacturer's recommendations.

The owner or operator shall record control equipment inspections and maintenance.

Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 88-A-084-S1

Monitoring Requirements

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

EP HR03 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🖂

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

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

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

Emission Point ID Number: HR04 – Hull/ Pellet Storage

Emission Unit vented through this Emission Point: HR04 Emission Unit Description: Hull/Pellet storage Raw Material/Fuel: Hulls Rated Capacity: 14.4 Tons/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: <20% Authority for Requirement: Polk County Rules Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM Emission Limit: 0.01 gr/scf Authority for Requirement: State of Iowa Construction Permit Number 09-A-412

Pollutant: PM10 Emission Limit: 0.008 lb/hr Authority for Requirement: State of Iowa Construction Permit Number 09-A-412

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 65 Stack Diameter (inches): 20 Stack Exhaust Flow Rate (acfm): Natural Vent Stack Temperature (°F): Ambient Discharge Style: Obstructed Vertical Authority for Requirement: State of Iowa Construction Permit Number 09-A-412

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

EP HR04 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🔀

Emission Point ID Number: MP01 – Dryer/Cooler (DTDC)

Associated Equipment

ЕР	EU	CE ID Number	Control Equipment Description
MP01	MP01	MP01A	1 of 4 cyclones in parallel
MP01	MP01	MP01B	1 of 4 cyclones in parallel
MP01	MP01	MP01C	1 of 4 cyclones in parallel
MP01	MP01	MP01D	1 of 4 cyclones in parallel

Applicable Requirements

Emission Unit vented through this Emission Point: MP01 Emission Unit Description: Dryer/Cooler Portion of DTDC Raw Material/Fuel: Meal Rated Capacity: 250 Tons/hr

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

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

Pollutant: Opacity Emission Limit: <20% Authority for Requirement: Polk County Construction Permit Number1626 Modified #3 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/PM10	
Emission Limit: 0.76 lb/hr,	3.34 tpy, 0.10 gr/scf
Authority for Requirement:	Polk County Construction Permit Number1626 Modified #3
	Polk County Board of Health Rules and Regulations
	Chapter V, Section 5-16

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 55
Stack Diameter (inches): 60
Stack Exhaust Flow Rate (acfm): 56,000
Stack Temperature (°F): 125
Discharge Style: Unobstructed Vertical
Authority for Requirement: Polk County Construction Permit Number 1626 Modified #3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

EP MP01 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🔀

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

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

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

Emission Point ID Number: MP02A – Meal Grinding / Meal Transfer

Associated Equipment

Associated Emission Unit ID Number: MP02A, MP03 Emissions Control Equipment ID Number: MP02 Emissions Control Equipment Description: Carter Day Baghouse Model Number 376RF6

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
MP02A	MP02A	Meal Grinding	Bean Meal	250 Tons/hr
MP02A	MP03	Meal Transfer	Bean Meal	250 Tons/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: <20% Authority for Requirement: Polk County Construction Permit Number 0090 Modified #4 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/PM10 Emission Limit: 0.75 lb/hr, 3.285 Tons/yr, 0.10 gr/scf Authority for Requirement: Polk County Construction Permit Number 0090 Modified #4 Polk County Board of Health Rules and Regulations Chapter V, Section 5-16

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 62
Stack Diameter (inches): 36
Stack Exhaust Flow Rate (acfm): 20,000
Stack Temperature (°F): 81
Discharge Style: Unobstructed Vertical
Authority for Requirement: Polk County Construction Permit Number 0090 Modified #4

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The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

EP MP02A shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🖂

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

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

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

Emission Point ID Number: MP05 – Meal Building and Conveying

Associated Equipment

Associated Emission Unit ID Numbers: MP05 Emissions Control Equipment ID Number: MP05 Emissions Control Equipment Description: Carter Day Model Number 144RJ84 Baghouse

Emission Unit vented through this Emission Point: MP05 Emission Unit Description: Meal Building and Conveying Raw Material/Fuel: Meal Rated Capacity: 220 Tons/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: <20% Authority for Requirement: Polk County Construction Permit Number 0102 Modified Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/PM10 Emission Limit: 0.40 lb/hr, 1.75 Tons/yr, 0.10 gr/scf Authority for Requirement: Polk County Construction Permit Number 0102 Modified Polk County Board of Health Rules and Regulations Chapter V, Section 5-16

Stack/Vent (Emission Point) Specifications

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 48 Stack Opening, (inches, dia.): 34 Exhaust Flow Rate (acfm): 13,500 Exhaust Temperature (°F): Ambient Discharge Style: Unobstructed Vertical Authority for Requirement: Polk County Construction Permit Number 0102 Modified

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The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Polk County AQD recognizes that the temperature and flowrate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Polk County AQD and obtain a permit amendment, if required.

Monitoring Requirements

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

EP MP05 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observet, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🖂

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

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

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

Emission Point ID Number: MP06 – Truck Load-out

Associated Equipment

Associated Emission Unit ID Numbers: MP06 Emissions Control Equipment ID Number: MP06 Emissions Control Equipment Description: Carter Day Model Number144RJ96 Baghouse

Emission Unit vented through this Emission Point: MP06 Emission Unit Description: Meal/Hull Truck Load-out Raw Material/Fuel: Meal Rated Capacity: 230 Tons/hr

Applicable Requirements

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

Pollutant: Opacity Emission Limit: <20% Authority for Requirement: Polk County Construction Permit Number 2128 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/PM10 Emission Limit: 0.75 lb/hr, 3.285 Tons/yr, 0.10 gr/scf Authority for Requirement: Polk County Construction Permit Number 2128 Polk County Board of Health Rules and Regulations Chapter V, Section 5-16

Stack/Vent (Emission Point) Specifications

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 32 Stack Opening, (inches, dia.): 38 Exhaust Flow Rate (acfm): 15,000 Exhaust Temperature (°F): Ambient Discharge Style: Unobstructed Vertical Authority for Requirement: Polk County Construction Permit Number 2128

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The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Polk County AQD recognizes that the temperature and flowrate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Polk County AQD and obtain a permit amendment, if required.

Monitoring Requirements

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

EP MP06 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observet, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🖂

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

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

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

Emission Point ID Number: MP07A – Meal Rail Load-out

Associated Equipment

Associated Emission Unit ID Numbers: MP07 Emissions Control Equipment ID Number: MP07A Emissions Control Equipment Description: MAC Model 144MPH416 Baghouse

Emission Unit vented through this Emission Point: MP07 Emission Unit Description: Meal Rail Load-out Raw Material/Fuel: Meal Rated Capacity: 300 Tons/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: <20% Authority for Requirement: Polk County Construction Permit Number 0105 Modified #2 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/PM10 Emission Limit: 0.75 lb/hr, 3.285 Tons/yr, 0.10 gr/scf Authority for Requirement: Polk County Construction Permit Number 0105 Modified #2 Polk County Board of Health Rules and Regulations Chapter V, Section 5-16

Stack/Vent (Emission Point) Specifications

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 40 Stack Opening, (feet, dia.): 2.83 Exhaust Flow Rate (scfm): 15,700 Exhaust Temperature (°F): Ambient Discharge Style: Vertical Authority for Requirement: Polk County Construction Permit Number 0105 Modified #2 The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Polk County AQD recognizes that the temperature and flowrate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Polk County AQD and obtain a permit amendment, if required.

Monitoring Requirements

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

EP MP07A shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observet, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🖂

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

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

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

Emission Point ID Number: MP08A - Meal Storage Tank Vent

Associated Equipment

Associated Emission Unit ID Numbers: MP08A Emissions Control Equipment ID Number: MP08A Emissions Control Equipment Description: MAC Model 54AVS16 Baghouse

Emission Unit vented through this Emission Point: MP08A Emission Unit Description: Meal Tank #1 Raw Material/Fuel: Soybean Meal Rated Capacity: 137 tons/hour

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: <20% Authority for Requirement: Polk County Construction Permit Number 2340 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/PM10 Emission Limit: 0.15 lb/hr, 0.65 Ton/yr, 0.02 gr/dscf Authority for Requirement: Polk County Construction Permit Number 2340

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 101.9 Stack Opening, (inches, dia.): 4 x 5 Exhaust Flow Rate (scfm): 865 Exhaust Temperature (°F): Ambient Discharge Style: Horizontal Authority for Requirement: Polk County Construction Permit Number 2340

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The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Polk County AQD recognizes that the temperature and flowrate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Polk County AQD and obtain a permit amendment, if required.

Monitoring Requirements

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

EP MP08A shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observet, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

 Agency Approved Operation & Maintenance Plan Required? Yes
 No

 Facility Maintained Operation & Maintenance Plan Required? Yes
 No

 Compliance Assurance Monitoring (CAM) Plan Required? Yes
 No

Emission Point ID Number: MP08B - Meal Storage Tank Vent

Associated Equipment

Associated Emission Unit ID Numbers: MP08A Emissions Control Equipment ID Number: MP08B Emissions Control Equipment Description: MAC Model 54AVS16 Baghouse

Emission Unit vented through this Emission Point: MP08A Emission Unit Description: Concrete Meal Tank #2 Raw Material/Fuel: Soybean Meal Rated Capacity: 137 tons/hour

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: <20% Authority for Requirement: Polk County Construction Permit Number 2340 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/PM10 Emission Limit: 0.21 lb/hr, 0.94 Ton/yr, 0.02 gr/dscf Authority for Requirement: Polk County Construction Permit Number 2340

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 97.5 Stack Opening, (inches, dia.): 5.5 x 7 Exhaust Flow Rate (scfm): 1,250 Exhaust Temperature (°F): Ambient Discharge Style: Horizontal Authority for Requirement: Polk County Construction Permit Number 2340 The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Polk County AQD recognizes that the temperature and flowrate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Polk County AQD and obtain a permit amendment, if required.

Monitoring Requirements

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

EP MP08B shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observet, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

 Agency Approved Operation & Maintenance Plan Required? Yes
 No

 Facility Maintained Operation & Maintenance Plan Required? Yes
 No

 Compliance Assurance Monitoring (CAM) Plan Required? Yes
 No

Emission Point ID Number: MP08C - Meal Storage Tank Vent

Associated Equipment

Associated Emission Unit ID Numbers: MP08A Emissions Control Equipment ID Number: MP08C Emissions Control Equipment Description: MAC Model 54AVS16 Baghouse

Emission Unit vented through this Emission Point: MP08A Emission Unit Description: Meal Tank #3 Raw Material/Fuel: Soybean meal Rated Capacity: 137 tons/hour

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: <20% Authority for Requirement: Polk County Construction Permit Number 2340 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/PM10 Emission Limit: 0.15 lb/hr, 0.65 Ton/yr, 0.02 gr/dscf Authority for Requirement: Polk County Construction Permit Number 2340

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 101.9 Stack Opening, (inches, dia.): 4 x 5 Exhaust Flow Rate (scfm): 865 Exhaust Temperature (°F): Ambient Discharge Style: Horizontal Authority for Requirement: Polk County Construction Permit Number 2340 The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Polk County AQD recognizes that the temperature and flowrate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Polk County AQD and obtain a permit amendment, if required.

Monitoring Requirements

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

EP MP08C shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

 Agency Approved Operation & Maintenance Plan Required? Yes
 No

 Facility Maintained Operation & Maintenance Plan Required? Yes
 No

 Compliance Assurance Monitoring (CAM) Plan Required? Yes
 No

Emission Point ID Number: MP09A, MP09B - Meal Blend Tanks Vents

Associated Equipment:

Associated Emission Unit ID Numbers: MP09A, MP09B Emissions Control Equipment ID Numbers: Not Applicable Emissions Control Equipment Description: Not Applicable

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
MP09A	MP09A	East Meal Blend Tank	Bean Meal	200 Tons/hr
MP09B	MP09B	West Meal Blend Tank	Bean Meal	200 Tons/hr

Applicable Requirements

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

Emissions shall not exceed the levels specified below for each individual emission point.

Pollutant: Opacity Emission Limit: <20% Authority for Requirement: Polk County Construction Permit Number 2129 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/PM10 Emission Limit: 0.077 lb/hr, 0.34 Ton/yr, 0.10 gr/dscf Authority for Requirement: Polk County Construction Permit Number 2129 Polk County Board of Health Rules and Regulations Chapter V, Section 5-16

Emission Point Characteristics

Each individual emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 128.5 Stack Opening, (inches, dia.): 27.12 Exhaust Flow Rate (scfm): Passive Vent Exhaust Temperature (°F): Ambient Discharge Style: Vertical Authority for Requirement: Polk County Construction Permit Number 2129 The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Polk County AQD recognizes that the temperature and flowrate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Polk County AQD and obtain a permit amendment, if required.

Monitoring Requirements

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

EP MP09A and EP MP09B shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

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

Emission Point ID Number: MP010 – Meal/Hull Unloading Pit

Associated Equipment

Associated Emission Unit ID Numbers: MP010 Emissions Control Equipment ID Number: Not Applicable Emissions Control Equipment Description: Not Applicable

Emission Unit vented through this Emission Point: MP010 Emission Unit Description: Meal/Hull Unloading Pit Raw Material/Fuel: Soybean meal and hulls Rated Capacity: 260 tons/hour

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: 5% Authority for Requirement: Polk County Construction Permit Number 1775

Pollutant: PM Emission Limit: 28.22 lb/hr, 1.62 Ton/yr Authority for Requirement: Polk County Construction Permit Number 1775 Polk County Board of Health Rules and Regulations Chapter V, Section 5-16

Pollutant: PM10 Emission Limit: 10.15 lb/hr, 0.59 Ton/yr Authority for Requirement: Polk County Construction Permit Number 1775

Operational Limits & Requirements

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

Work Practice Standards, Reporting & Recordkeeping:

The facility is limited to receiving 21,000 tons of meal and 2,000 tons of hulls/hull pellets per 12 month period rolled monthly in EU MP010.

The facility shall maintain a log of the amount of meal, hulls and hull pellets received in EU MP010. The amounts shall be totaled monthly and a rolling 12 month total shall be recorded.

Said log shall be made available to representatives of Polk County AQD upon request.

Monitoring Requirements

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

EP MP10 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >5% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained	Operation	& Maintenance Plan	Required?	Yes	No	\boxtimes
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Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🖂

Emission Point ID Number: R01 – Filter Aid Receiving/Storage

Associated Equipment

Associated Emission Unit ID Number : R01 Emissions Control Equipment ID Number: R01 Emissions Control Equipment Description: Flex-Kleen Model 84- BV9 Baghouse

Emission Unit vented through this Emission Point: R01 Emission Unit Description: Filter Aid Receiving/Storage Raw Material/Fuel: Filter Aid Rated Capacity: 6 Tons/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: <20%	
Authority for Requirement:	Polk County Construction Permit Number 0366 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM Emission Limit: 0.1 gr/scf	
Authority for Requirement:	Polk County Construction Permit Number 0366
	Polk County Board of Health Rules and Regulations
	Chapter V, Section 5-14

Monitoring Requirements

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

EP R01 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🔀

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

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

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

Emission Point ID Number: R02 – Bleaching Clay Receiving/Storage

Associated Equipment

Associated Emission Unit ID Numbers: R02 Emissions Control Equipment ID Number: R02 Emissions Control Equipment Description: Flex-kleen Model Number 84BV9 Baghouse

Emission Unit vented through this Emission Point: R02 Emission Unit Description: Bleaching Clay Receiving/Storage Raw Material/Fuel: Bleaching Clay Rated Capacity: 7.5 Tons/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: <20% Authority for Requirement: Polk County Construction Permit Number 0367 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM Emission Limit: 0.1 gr/scf	
e	Polk County Construction Permit Number 0367
	Polk County Board of Health Rules and Regulations
	Chapter V, Section 5-14

Monitoring Requirements

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

EP R02 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🔀

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

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

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

Emission Point ID Number: R03 – Slurry/Precoat Tanks

Associated Equipment

Associated Emission Unit ID Number: R03 Emissions Control Equipment ID Number: R03 Emissions Control Equipment Description: Ducon Model Number 3 Scrubber

Emission Unit vented through this Emission Point: R03 Emission Unit Description: Slurry/Precoat Tanks Raw Material/Fuel: Filter Aid/Bleaching Clay/Vegetable Oil Rated Capacity: 1.6 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: <20% Authority for Requirement: Polk County Construction Permit Number 0414 Modified #2 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/PM10 Emission Limit: 0.90 lb/hr, 3.94 Tons/yr, 0.10 gr/scf Authority for Requirement: Polk County Construction Permit Number 0414 Modified #2 Polk County Board of Health Rules and Regulations Chapter V, Section 5-14

Stack/Vent (Emission Point) Specifications

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 29.5
Stack Opening, (inches, dia.): 12
Exhaust Flow Rate (scfm): 1,600
Exhaust Temperature (°F): 150
Discharge Style: Unobstructed Vertical
Authority for Requirement: Polk County Construction Permit Number 0414 Modified #2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Polk County AQD recognizes that the temperature and flowrate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Polk County AQD and obtain a permit amendment, if required.

Operational Limits & Requirements

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

Work Practice Standards, Reporting & Recordkeeping:

The facility shall not process more than 1,697,250 tons of soybeans per 12-month rolling period, rolled monthly.

The facility shall record and maintain daily records of the number of tons of soybeans processed.

All records shall be maintained on site for a period of not less than 5 years and shall be made available to representatives of this agency upon request.

Monitoring Requirements

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

EP R03 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observet, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

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

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

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

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

Emission Point ID Number: R04 – Filteraid/Bleaching Clay Daybins

Associated Equipment

Associated Emission Unit ID Number: R04 Emissions Control Equipment ID Number: R04A, R04B Emissions Control Equipment Description: 2-Torrit Day Model Number 84-OB Bagfilters (R04A, R04B)

Emission Unit vented through this Emission Point: R04 Emission Unit Description: Day Bins Raw Material/Fuel: Filteraid/Bleaching Clay Rated Capacity: 1.6 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: <20%
Authority for Requirement: Polk County Construction Permits Numbered 0368, 0369 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9
Pollutant (R04A, R04B): PM
Emission Limit: 0.1 gr/scf

Authority for Requirement: Polk County Construction Permits Numbered 0368 and 0369 Polk County Board of Health Rules and Regulations Chapter V, Section 5-14

Monitoring Requirements

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

EP R04 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🖂

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

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

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

Emission Point ID Number: R06 – Refinery Cooling Tower

Associated Equipment

Emission Unit vented through this Emission Point: R06 Emission Unit Description: 3 cell Refinery Cooling Tower Raw Material/Fuel: Water Rated Capacity: 6,000 gallon/minute

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: <20% Authority for Requirement: Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM Emission Limit: 0.45 lb/hr, 1.97 Tons/yr, 0.10 gr/dscf Authority for Requirement: Polk County Construction Permit Number 2134 Polk County Board of Health Rules and Regulations Chapter V, Section 5-14

Pollutant: PM10 Emission Limit: 0.225 lb/hr, 0.99 Ton/yr, 0.10 gr/dscf Authority for Requirement: Polk County Construction Permit Number 2134

Operational Limits & Requirements

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

Work Practice Standards, Reporting & Recordkeeping:

The owner or operator shall not use any chromium based water treatment chemicals in the cooling tower.

The owner or operator shall not use any water treatment chemicals in the cooling tower containing VOC or HAP compounds.

Technical Data Sheets of all additives to the cooling tower shall be maintained on-site.

The Total Dissolved Solids (TDS) level shall not exceed 3,000 mg/l.

The owner or operator shall install a continuous conductivity monitor. The conductivity monitor shall initiate blowdown when the conductivity reaches a level equivalent to a TDS concentration of no greater than 3,000 mg/l

All records required above shall be maintained on-site for a period of five (5) years and shall be made available to representatives of Polk County AQD upon request.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required?	Yes	No 🖂
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Facility Maintained Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🖂

Emission Point ID Number: R07 – Refinery Steam Generator

Associated Equipment

Emission Unit vented through this Emission Point: R07 Emission Unit Description: Refinery Steam Generator Raw Material/Fuel: Natural Gas Rated Capacity: 20.0 MM BTU

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: <20 % Authority for Requirement: Polk County Construction Permit Number 2202 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/PM10 Emission Limits: 0.15 lb/hr, 0.67 Ton/yr, 0.10 gr/dscf Authority for Requirement: Polk County Construction Permit Number 2202 567 IAC 23.3 (2) "b"

Pollutant: SO2 Emission Limits: 0.01 lb/hr, 0.05 Ton/yr, 500 ppm Authority for Requirement: Polk County Construction Permit Number 2202 567 IAC 23.3 (3)"e"

Pollutant: NOx Emission Limit: 2.00 lb/hr, 8.76 Tons/yr Authority for Requirement: Polk County Construction Permit Number 2202

Pollutant: VOC Emission Limit: 0.11 lb/hr, 0.48 Tons/yr Authority for Requirement: Polk County Construction Permit Number 2202

Pollutant: CO Emission Limit: 1.68 lb/hr, 7.36 Tons/yr Authority for Requirement: Polk County Construction Permit Number 2202

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 45 Stack Diameter (inches): 48 Stack Exhaust Flow Rate (scfm): 6000 @ 13.5" WC Stack Temperature (°F): 388 Discharge Style: Unobstructed Vertical Authority for Requirement: Polk County Construction Permit Number 2202

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Polk County AQD recognizes that the temperature and flowrate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Polk County AQD and obtain a permit amendment, if required.

Operational Limits & Requirements

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

Work Practice Standards, Reporting & Recordkeeping:

The owner or operator shall comply with all applicable requirements of 40 CFR 60 Subpart Dc-Standards of Performance for Small Industrial, Commercial, and Institutional Boilers and Process Heaters.

The owner or operator shall comply with the recordkeeping requirements of (0.48c(g))(1)-(3), and (0.48c(i))

The owner or operator shall comply with the reporting requirements of §60.48c(a) and §60.48c(j)

All records required above shall be maintained on-site for a period of five (5) years and shall be made available to representatives of Polk County AQD upon request.

Authority for Requirement: Polk County Construction Permit Number 2202 40 CFR Part 60 Subpart Dc

NESHAP

This equipment is subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63 Subpart DDDDD]. Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Compliance Assurance Monitoring (CAM) Plan Required? Yes No X Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: R08 – Emergency Fire Pump

Emission Unit vented through this Emission Point: R08 Emission Unit Description: Emergency Fire Pump at Refinery Raw Material/Fuel: Diesel Rated Capacity: 357 hp/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: <20% Authority for Requirement: Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM Emission Limit: 0.1 gr/dscf Authority for Requirement: 567 IAC 23.3 (2) "a"

Pollutant: SO2 Emission Limit: 0.5 lb/MM BTU Authority for Requirement: 567 IAC 23.3 (3)"b"

NESHAP

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

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

Fuel Requirements

No requirements except (beginning January 1, 2015) if you own or operate an existing emergency compression ignition stationary engine with a site rating of more than 100 bhp and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. Those requirements include a maximum sulfur content of 15 ppm (0.0015%) by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR 63.6604(b)

Operation and Maintenance Requirements 40 CFR 63.6602, 63.6625, 63.6640 and Tables 2c and 6 to Subpart ZZZZ

- 1. Change oil and filter every 500 hours of operation or annually, whichever comes first. (See 63.6625(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, emergency demand response 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, emergency demand response and periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. 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 and emergency demand response. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, 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

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

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

- 7. An initial notification is not required per 40 CFR 63.6645(a)(5).
- 8. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2c. (See Footnote 1 of Table 2c for more information.)
- 9. If you own or operate an emergency stationary RICE with a site rating of more than 100 bhp that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), you must submit an annual report. See 40 CFR 63.6650(h) for additional information.

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

Emission Point ID Number: U03 Rail Receiving Number 1/ Conveying and U03F Rail Receiving Number 1 Fugitive Emissions

Associated Equipment

Associated Emission Unit ID Numbers: U03 Emissions Control Equipment ID Number: U03 Emissions Control Equipment Description: Donaldson Model 232-RFW-12 Baghouse

Emission Unit vented through this Emission Point: U03 Emission Unit Description: Rail receiving Number 1/Conveying and Rail Receiving Number 1 Fugitive Emissions Raw Material/Fuel: Soybeans Rated Capacity: 960 tons/hour

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.) The emissions from Emission Point U03 shall not exceed the levels specified below.

Pollutant: Opacity Emission Limits: None allowed from stack. Authority for Requirement: Polk County Construction Permit Number 0802 Modified 40 CFR60 Subpart DD 567 IAC 23.1(2)"000"

Pollutant: PM/PM10 Emission Limits: 2.57 lb/hr, 11.26 Tons/yr, 0.01 gr/dscf Authority for Requirement: Polk County Construction Permit Number 0802 Modified 40 CFR60 Subpart DD 567 IAC 23.1(2)"000"

The emissions from Emission Point U03F shall not exceed the levels specified below.

Pollutant: Opacity Emission Limits: 5% Authority for Requirement: Polk County Construction Permit Number 0802 Modified 40 CFR60 Subpart DD 567 IAC 23.1(2)"000"

Pollutant: PM Emission Limits: 1.54 lb/hr, 6.73 Tons/yr Authority for Requirement: Polk County Construction Permit Number 0802 Modified 40 CFR60 Subpart DD 567 IAC 23.1(2)"000" Pollutant: PM10 Emission Limits: 0.37 lb/hr, 1.64 Tons/yr Authority for Requirement: Polk County Construction Permit Number 0802 Modified 40 CFR60 Subpart DD 567 IAC 23.1(2)"000"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 28 minimum above grade
Stack Diameter (inches): 42
Stack Exhaust Flow Rate (scfm): 30,000
Stack Temperature (°F): Ambient
Discharge Style: Vertical with Obstructing Rain Cap
Authority for Requirement: Polk County Construction Permit Number 0802 Modified

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Polk County AQD recognizes that the temperature and flowrate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Polk County AQD and obtain a permit amendment, if required.

Monitoring Requirements

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

EP U03 and EP U03F shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >0% is observed from the stack, or fugitive emissions greater than five percent (5%) opacity, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Stack testing:

Pollutant – PM10 One Stack Test to be completed by - No later than April 22, 2016 Test Method - 40 CFR 51, Appendix M, Method 201A with 202 Authority for Requirement - 567 IAC 22.108(3)

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🖂

Facility Maintained Operation & Maintenance Plan Required? Yes 🗌 No 🖂

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🛛 No 🗌

<u>Compliance Assurance Monitoring Plan</u>: Rail Receiving Number 1/ Conveying with Baghouse

Emission Unit Information

Grain Rail Receiving/Conveying

Emission Unit: Rail Receiving #1/Conveying (U03) Emission Control Technique: Baghouse Control Device Identification Number(s): CE U03 Emission Point Identification Number(s): EP U03

Emissions generated by the grain rail receiving pit and conveying system are controlled by baghouse CE U03. Emission point EP U03 is the exhaust for baghouse CE U03.

Applicable Requirement for U03

Pollutant: PM/PM10 Emission Limits: 2.57 lb/hr, 11.26 Tons/yr, 0.01 gr/dscf Authority for Requirement: Polk County Construction Permit Number 0802 Modified 40 CFR60 Subpart DD 567 IAC 23.1(2)"000"

Monitoring Approach

Indicators

Indicator #1: Opacity (Visible Emission)

Visible Emissions (opacity) was selected as a performance indicator because it is indicative of good operation and maintenance of the baghouse. When the baghouse is operating optimally, there will be little to no visible emissions from the exhaust. In general, an increase in visible emissions indicates reduced performance of the baghouse.

Indicator #2: Pressure Drop

Pressure range across the filter bags in an indicator of baghouse performance. A pressure change outside the indicator range indicates a decrease in baghouse performance and potentially indicates an increase in particulate emissions. A pressure gauge is installed to measure the differential pressure between the baghouse inlet and outlet, allowing representative data to be obtained.

Indicator Range

Indicator #1: Opacity (Visible Emission)

The indicator range is visible emissions or no visible emissions.

Indicator #2: Pressure Drop

Control Equipment ID#	Emission Unit Description	Acceptable Indicator Range
CE U03	Rail Receiving #1/Conveying Baghouse	1-6" wg

Measurement Approach

Indicator #1: Opacity (Visible Emissions)

Visible emission observations will be performed weekly on the baghouse. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from observation of visible emissions. Records of the weekly visible emission checks will be maintained for five years.

Indicator #2: Pressure Drop

Each day the baghouse is in operation, the pressure level across the filter bags will be manually recorded from the baghouse pressure gauge to ensure the level is within the appropriate operating range. Records of pressure readings will be maintained for five years. <u>Performance Criteria</u>

To ensure the data collected is representative, visible emission observations and pressure drop readings will be taken when the equipment is operating. The person performing the observations and readings will be qualified to perform such duties and the individual performing the Method 9 readings, when required, will have a valid certification. The equipment will not be operating while corrective action is being performed.

Response to Excursion

Indicator #1: Opacity (Visible Emissions)

If visible emissions are observed during a weekly visible emissions check, corrective action will be taken as soon as possible, but no later than eight hours from observation of visible emissions. A deviation shall be reported in the semiannual compliance report.

Indicator #2: Pressure Drop

If an observed pressure drop across the filter bags is outside the appropriate operating range for more than five minutes, corrective action will be taken within 8 hours. A deviation shall be reported in the semiannual compliance report.

Emission Point ID Number: U05, U05A - Grain Storage - 4 West Bean Tanks

Associated Equipment

Emission Unit vented through this Emission Point: U05 Emission Unit Description: Grain storage – 4 West bean tanks Raw Material/Fuel: Soybeans Rated Capacity: 500 tons/hour

Applicable Requirements

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

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

Pollutant: Opacity Emission Limit: <20% Authority for Requirement: Polk County Construction Permit Number 2595 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/PM10/PM2.5 Emission Limit: 0.59 lb/hr, 2.58 Ton/yr, 0.10 gr/scf Authority for Requirement: Polk County Construction Permit Number 2595 567 IAC 23.4(7) Standards for Grain Handling and Processing Plants. Polk County Board of Health Rules and Regulations Chapter V, Section 5-16

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Emission Point Characteristic	U05-24 gooseneck vents	U05-24 round vents
Shape	Rectangular	Circular
Size/Diameter	48 inches	24 inches
Height Above Ground	88.4 feet	70.8 feet
Discharge Style	Vertical Obstructed	Vertical Obstructed
Rated Flow Rate (scfm)	N/A	N/A
Exhaust Temperature	Ambient	Ambient

Authority for Requirement: Polk County Construction Permit Number 2595

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Polk County AQD recognizes that the temperature and flowrate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Polk County AQD and obtain a permit amendment, if required.

Monitoring Requirements

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

EP U05, U05A shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🔀

Emission Point ID Number: U07 – West Truck Receiving/East Truck Receiving/West Side Grain Conveying

Associated Equipment

Associated Emission Unit ID Numbers: U01, U02, U04 Emissions Control Equipment ID Number: U07 Emissions Control Equipment Description: Donaldson Model 376 RFW-10 Baghouse

Emission Unit vented through this Emission Point: U01, U02, U04 Emission Unit Description: West Side Truck Dump, East Side Truck Dump, West Side Coveying Raw Material/Fuel: Soybeans Rated Capacity: 500 Tons/hour

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: <20% Authority for Requirement: Polk County Construction Permit Number 2235 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM/PM10 Emission Limit: 1.132 lb/hr, 1.81 Tons/yr, 0.1 gr/scf Authority for Requirement: Polk County Construction Permit Number 2235 567 IAC 23.4(7) Standards for Grain Handling and Processing Plants. Polk County Board of Health Rules and Regulations Chapter V, Section 5-16

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 50 Stack Diameter (inches): 44 Stack Exhaust Flow Rate (acfm): 30,000 Stack Temperature (°F): Ambient Discharge Style: Unobstructed Vertical Authority for Requirement: Polk County Construction Permit Number 2235 The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Polk County AQD recognizes that the temperature and flowrate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Polk County AQD and obtain a permit amendment, if required.

Monitoring Requirements

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

EP U07 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observet, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🔀

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🖂

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

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

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

Emission Point ID Number: U08 – Fugitive Road Emissions

Associated Equipment

Emission Unit vented through this Emission Point: U08 Emission Unit Description: Fugitive Road Emissions Raw Material/Fuel: Fugitive Dust Rated Capacity: Not Applicable

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: <20% Authority for Requirement: Polk County Construction Permit Number 1979 Polk County Board of Health Rules and Regulations Chapter V, Section 5-9

Pollutant: PM Emission Limit: 121.16 Tons/yr Authority for Requirement: Polk County Construction Permit Number 1979 Polk County Board of Health Rules and Regulations Chapter V, Section 5-14

Pollutant: PM10 Emission Limit: 23.63 Tons/yr Authority for Requirement: Polk County Construction Permit Number 1979

Operational Limits & Requirements

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

Work Practice Standards, Reporting & Recordkeeping:

The facility shall comply with Polk County Board of Health Rules and Regulations Chapter V, Article IX, Division 1 Fugitive Dust requirements.

Truck Traffic on the haul roads shall not exceed 5 mph. The speed limit shall be posted.

Truck loads shall be covered leaving the property when covers are available.

Any spills on the road shall be cleaned up as soon as practical.

The facility shall sweep/vacuum the haul roads a minimum of once per week.

The sweeping/vacuuming need not occur when:

(a) salt or sand is applied to the road for worker safety.

(b) when the roads are wet from precipitation

The facility shall maintain a record of the sweeping /vacuuming activities and shall include a record of any deviation from the listed requirements due to suspended use of the haul roads or weather conditions.

Authority for Requirement: Polk County Construction Permit Number 1979

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 🖂

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, 7900 Hickman Rd, Suite #1, Windsor Heights, Iowa 50324, 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 Permits, 11201 Renner Blvd., Lenexa, KS 661219. 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

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.
 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.
 The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.

- a. Form 1.0 "Facility Identification";
- b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
- c. Form 5.0 "Title V annual emissions summary/fee"; and
- d. Part 3 "Application certification."

4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms: a. Form 1.0 "Facility Identification";

- b. Form 5.0 "Title V annual emissions summary/fee";
- c. Part 3 "Application certification."

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.)

 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.
 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) 281-8694 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. 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. Oral 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 oral 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 may be made 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 oral 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 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 must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. 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.

e. The changes comply with all applicable requirements.

f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:

i. A brief description of the change within the permitted facility,

ii. The date on which the change will occur,

iii. Any change in emission as a result of that change,

iv. The pollutants emitted subject to the emissions trade

v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.

vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and

vii. Any permit term or condition no longer applicable as a result of the change. *567 IAC 22.110(1)*

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). 567 IAC 22.110(3)

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. 567 *IAC* 22.110(4)

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

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that is required to do 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 Permit Modification.

a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:

i. Do not violate any applicable requirements

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 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.

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 a 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, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant 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, and those requirements that apply to Title V issuance and renewal. *567 IAC 22.111-567 IAC 22.113* 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 22.105(1)"a"(4)*

G19. Duty to Obtain Construction Permits

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. *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, training fires and controlled burning of a demolished building. 567 IAC 23.1(3)"a", and 567 IAC 23.2

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by 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)

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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 substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. 567 IAC 22.108(9)"c"

2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.

a. Reopening and revision on this ground is <u>not</u> required if the permit has a remaining term of less than three years;

b. Reopening and revision on this ground is <u>not</u> required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.

c. Reopening and revision on this ground is <u>not</u> required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a"*, *567 IAC 22.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:

a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;

b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. 567 IAC 22.114(1)

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

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 to determine transferability of the permit. 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. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. 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. 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 7900 Hickman Road, Suite #1 Windsor Heights, IA 50324 (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 buildup 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:

Chief of Air Permits U.S. EPA Region 7 Air Permits and Compliance Branch 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:

the Director is:

Chief, Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite #1 Windsor Heights, IA 50324 (515) 725-9500

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 1 909 West Main – Suite 4 Field Office 2 2300-15th St., SW Manchester, IA 52057 (563) 927-2640

Field Office 3

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

Field Office 5

401 SW 7th Street, Suite I Des Moines, IA 50309 (515) 725-0268

Polk County Public Works Dept.

Air Quality Division 5885 NE 14th St. Des Moines, IA 50313 (515) 286-3351 Mason City, IA 50401 (641) 424-4073

Field Office 4

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

Field Office 6

1023 West Madison Street

Washington, IA 52353-1623 (319) 653-2135

Linn County Public Health

Air Quality Branch 501 13th St., NW Cedar Rapids, IA 52405 (319) 892-6000

V. Appendix A: 40 CFR Part 63 Subpart GGGG

Web Link to the National Emissions Standards for Hazardous Air Pollutants: Solvent Extractions of Vegetable Oil

www.gpo.gov/fdsys/

See Featured Collections

- Code of Federal Regulations
- Choose year
- Title 40
- Part 63

V. Appendix B: 40 CFR Part 63 Subpart ZZZZ

Web Link to the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

www.gpo.gov/fdsys/

See Featured Collections

- Code of Federal Regulations
- Choose year
- Title 40
- Part 63

V. Appendix C: 40 CFR Part 63 Subpart DDDDD

Web Link to the National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

www.gpo.gov/fdsys/

See Featured Collections

- Code of Federal Regulations
- Choose year
- Title 40
- Part 63