

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

Name of Permitted Facility: Roquette America, Inc.
Facility Location: 1003 S. 5th Street, Keokuk, IA 52632
Air Quality Operating Permit Number: 08-TV-006R1
Expiration Date: September 26, 2021
Permit Renewal Application Deadline: March 26, 2021

EIQ Number: 92-2568
Facility File Number: 56-01-009

Responsible Official

Name: Michael McHale
Title: Plant Manager
Mailing Address: P.O. Box 6647, Keokuk, IA 52632
Phone #: (319) 526-5757

Permit Contact Person for the Facility

Name: William Gibson
Title: Environmental Department Manager
Mailing Address: P.O. Box 6647, Keokuk, IA 52632
Phone #: (319) 526-3411

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

For the Director of the Department of Natural Resources

Lori Hanson, Supervisor of Air Operating Permits Section

Date

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Abbreviations

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

Pollutants

| | |
|------------------------|--|
| PM..... | particulate matter |
| PM ₁₀ | particulate matter ten microns or less in diameter |
| SO ₂ | sulfur dioxide |
| NO _x | nitrogen oxides |
| VOC..... | volatile organic compound |
| CO..... | carbon monoxide |
| HAP..... | hazardous air pollutant |
| GHG..... | Greenhouse Gasses |

I. Facility Description and Equipment List

Facility Name: Roquette America, Inc.

Permit Number: 08-TV-006R1

Facility Description: Wet Corn Milling (SIC 2046)

Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|----------------------|---|---------------------------------|
| Barge Terminal | | | |
| 67-1 | BT-1 | Storage Bins 1&2 | 03-A-930-S2 |
| 67-2 | BT-2 | Storage Bins 3&4 | 03-A-931-S2 |
| 67-3 | BT-3 | Storage Bins 5&6 | 03-A-932-S2 |
| 67-A | BT-7 | Barge Terminal Unloading | 75-A-279 |
| 67-F-1 | BT-9 | Grain Dump Pit | NA |
| 67-F-2 | BT-10 | Grain Bin Unloading Conveyor | NA |
| | BT-11 | Grain Bin Unloading Conveyor | NA |
| 67-F-3 | BT-12 | Barge Loading Conveyor | NA |
| 67-F-4 | BT-13 | Barge Filling | NA |
| 67-F-5 | BT-14 | Truck Loading #1 Reclaim Leg | NA |
| 67-F-6 | BT-15 | Truck Loading #2 Reclaim Leg | NA |
| 72-F-1 | BT-8 | Flat Storage Building | NA |
| Bulk Chemical Storage | | | |
| 71-4 | BCS-4 | Sulfur Burner/Sulfurous Acid Production | 08-A-312-S1 |
| | BCS-4A | Railcar Vent | |
| 71-5 | BCS-1 | HCl Storage Tank Working And Breathing Losses | 03-A-026-S4 |
| | BCS-2 | HCl Storage Tank Working And Breathing Losses | |
| | BCS-3 | HCl Storage Tank Working And Breathing Losses | |
| Elevator | | | |
| 58-3 | EL-4 | Surge Bin | 81-A-148-S1 |
| 58-5 | EL-10 | Rail Dump Pit | 84-A-029-S2 |
| | EL-11 | Upriver Truck Dump Pit | |
| | EL-15 | Corn Screenings Loadout | |
| 58-F-4 | EL-11 | Upriver Truck Dump Pit Fugitives | NA |
| 58-F-5 | EL-10 | Rail Dump Pit Fugitives | NA |
| 58-F-6 | EL-15 | Corn Screenings Loadout Fugitives | NA |
| 58-8 | EL-5 | Vacuum System | NA |
| 58-11 | EL-2 | Upriver Dump Pit Belt Legs | 83-A-151-S1 |
| 58-14 | EL-6 | Elevator Downriver Grain Receiving | 81-A-147-S1 |
| 58-F-1 | EL-7 | Corn Conveying | 03-A-041 |
| 58-F-2 | EL-12 | Downriver Belly Dump Pit | NA |
| 58-F-3 | EL-14 | Overhead Belt Conveyor | 03-A-040 |
| 58-2/P | EL-9 | Elevator Exhaust Vents | NA |
| 58-R/BA | EL-8 | Corn Bins #14-30, 49-66 | NA |

Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|-----------------------|----------------------|---|---------------------------------|
| Feedhouse | | | |
| 51-4 | FH-1 | Gluten Ring Dryer | 01-A-366 |
| 51-5 | FH-2 | Gluten Meal Cooling | 01-A-367-S2 |
| 59-B7 | FH-32 | Fiber Press | NA |
| 59C-F-1 | FH-30 | Rail Car Loading | NA |
| 59-11 | FH-25 | Corn Transfer | 86-A-109 |
| 74-E | FH-31 | Fiber Press | 82-A-071 |
| 138-04 | FH-05N | Hammer Mill | 11-A-061-S1 |
| 138-06 | FH-08N | #4 Pellet Cooler | 11-A-062-S2 |
| | FH-09N | #3 Pellet Cooler | |
| | FH-43N | Dry Feed Pneumatic Conveyor | |
| 138-10 | FH-31N | Hammer Mill | 13-A-034 |
| 138-11 | FH-32N | Pellet Cooler Bucket Elevator (LC51) | 13-A-035 |
| | FH-33N | Bucket Elevator (MX53) | |
| | FH-34N | Conveyor (MX54) | |
| | FH-35N | Bucket Elevator (MX55) | |
| | FH-36N | Conveyor (MP52) | |
| | FH-37N | Conveyor (MP53) | |
| | FH-38N | Conveyor (MP54) | |
| | FH-39N | Conveyor (MP55) | |
| | FH-40N | Silo (M100) | |
| 139-1 | FH-10N | Fiber Steam Tube Dryer, 2 Stages | 11-A-066-S1 |
| 139-2 | FH-10N | Fiber Steam Tube Dryer, 2 Stages Bypass | 11-A-067-S2 |
| 140-1 | FH-41N | Gluten Truck Loadout | 11-A-068-S1 |
| | FH-42N | Pellet Truck Loadout | |
| 140-2 | FH-13N | #1 Pellet Loadout Bin | 11-A-069-S1 |
| 140-3 | FH-14N | #2 Pellet Loadout Bin | 11-A-070-S1 |
| 140-4 | FH-15N | Gluten Loadout Bin | 11-A-071-S2 |
| Generators | | | |
| 110-2 | RF-12 | Emergency Generator | 15-A-502 |
| EG-1 | EG-1 | Emergency Generator | NA |
| GH-1 | GH-1 | Emergency Generator | NA |
| GH-2 | GH-2 | Emergency Generator | 15-A-607 |
| 82A-1 | RE-4 | Emergency Generator | NA |
| 66-T | RC-09 | Engine Generator | NA |
| 66-U | RC-17 | Diesel Engine | NA |
| Germ | | | |
| 12-6 | G-4 | #4 Germ Dryer | 09-A-044 |
| | G-5 | #5 Germ Dryer | |
| | G-6 | #6 Germ Dryer | |
| 12-8 | G-2 | #2 Germ Dryer | 77-A-334-S1 |
| | G-3 | #3 Germ Dryer | |

Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|---------------------------|----------------------|----------------------------------|---------------------------------|
| 12-13 | G-12 | Germ Transfer | 01-A-059 |
| 12-14 | G-1 | #1 Germ Dryer | 09-A-045 |
| | G-7 | #7 Germ Dryer | |
| | G-8 | Germ Cooler | |
| Mill | | | |
| 7/8/9/10 | M-1 | Mill House Exhaust Vents | NA |
| 7-3 | M-2 | 17 Steep Tanks | 10-A-216-S1 |
| 7-16 | M-5A | 5 th Fiber Wash Tank | 09-A-463-S2 |
| | M-5B | 2 nd Grind Pit | |
| | M-5C | 3 rd Grind Pits | |
| 8-5 | M-6 | Fiber Wash Tanks & Filtrate Tank | 09-A-468-S2 |
| 8-8 | M-4 | Wet Corn Hopper Room | 09-A-462-S2 |
| 83-1 | M-66 | Steeping | 04-A-663-S2 |
| | M-67 | Steeping | |
| | M-68 | Steeping | |
| | M-69 | Steeping | |
| | M-74 | Steeping | |
| | M-75 | Steeping | |
| | M-76 | Steeping | |
| | M-77 | Steeping | |
| RASI | | | |
| 200 | 200 | Clamshell #1 To Hopper #1 | 10-A-286-S1 |
| 201 | 201 | Hopper #1 To Conveyor #1 | 10-A-287-S1 |
| 202 | 202 | Conveyor #1 To Conveyor #2 | 10-A-288-S1 |
| 203 | 203 | Conveyor #2 To Conveyor #3 | 10-A-289-S1 |
| 204 | 204 | Conveyor #3 To Conveyor #4 | 10-A-290-S1 |
| 205 | 205 | Conveyor #4 To Stacker | 10-A-291-S1 |
| 206 | 206 | Stacker To Coal Pile | 10-A-292-S1 |
| 207 | 207 | Coal/Coke Pile Receiving | 10-A-297-S1 |
| 208 | 208 | Coal/Coke Loader To Trucks | 10-A-295-S1 |
| 209 | 209 | Salt Loader To Trucks | 10-A-296-S1 |
| 210 | 210 | East Haul Road Traffic | 10-A-298-S1 |
| 211 | 211 | West Haul Road Traffic | 10-A-299-S1 |
| 213 | 213 | Coal/Coke Pile | 10-A-293 |
| 214 | 214 | Salt Pile | 10-A-294 |
| 215 | 215 | Coal/Coke Pile | 11-A-452 |
| Refineries A&B | | | |
| 7-21 | AB-2 | Carbon Receiver Tank | 96-A-1038-S4 |
| 16-26 | AB-19 | Sodium Bisulfate Tank | 97-A-665 |
| 16-31 | AB-3 | Syrup Spray Dryer | 75-A-179-S1 |
| 16-34 | AB-21 | DE Bulk Bag System | 01-A-024-S1 |

Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|----------------------------------|--|
| 19-1 | AB-22 | Bag Packager | 02-A-158-S2 |
| | AB-24 | Bagger | |
| 19-2 | 19-2 | Bag Handling System | 10-A-478 |
| 64-A | AB-4A | B Syrup Spray Dryer | 73-A-208-S2 |
| | AB-4B | B Syrup Spray Dryer Burner | |
| 64-1 | 64-1 | Flow Aid Hopper | 10-A-477 |
| Refinery C | | | |
| 66-18 | RC-2 | Carbon Regeneration Furnace #1 | 77-A-149-S6 |
| 66-21 | RC-5 | Soda Ash Storage | 97-A-599 |
| 66-27 | RC-3 | Filter Aid Storage | NA |
| 66-37 | RC-16 | Carbon Regeneration Furnace #2 | 01-A-086-S1 |
| Refinery D | | | |
| 84-D | RD-1 | Refinery D House Vacuum System | 94-A-602 |
| 84-10 | RD-2 | Drying | 94-A-603-S1 |
| | RD-3 | Dedusting | |
| | RD-4 | Reclaim Tank | |
| Refinery E | | | |
| 82-1 | RE-1 | DE Unloading | 02-A-561-S1 |
| 82-2 | RE-2 | DE Silo Fluidizer | 02-A-562-S1 |
| 82-3 | RE-3 | DE Transfer System | 02-A-563 |
| Refinery F | | | |
| 103-2 | RF-18 | DE Transfer | 10-A-233 |
| 107-1 | RF-4 | Tank | 99-A-083-S6 |
| | RF-4B | Tank | |
| | RF-5 | Tank | |
| | RF-6 | Dryer | |
| | RF-7 | Cooler | |
| 107-2 | RF-8 | Grinder | 99-A-084-S6 |
| | RF-9 | 12 Dedusting Pickup Points | |
| | RF-10 | House Vacuum w/ 20 Pickup Points | |
| | RF-14 | Powder Blending | |
| 107-3 | RF-15 | Carbohydrate Transfer System | 10-A-235-S1 |
| 107-4 | RF-20A | Tank | 10-A-236-S1 |
| | RF-20B | Tank | |
| | RF-20C | Tank | |
| | RF-21 | Tank | |
| | RF-22 | Dryer | |
| 107-5 | RF-23 | Carbohydrate Cooler | 10-A-237 |
| 107-6 | RF-25 | Carbohydrate Dryer | 10-A-238 |
| 107-7 | RF-26 | Carbohydrate Cooler | 10-A-239 |

Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|----------------------------------|--|
| 107-8 | RF-27 | Carbohydrate Grinder | 10-A-240 |
| 107-9 | RF-28 | Dedusting | 10-A-241 |
| | RF-30 | Packaging | |
| 107-10 | RF-29 | House Vacuum | 10-A-242 |
| 107-B | RF-24 | Carbohydrate Remelt Tank | 10-A-243-S1 |
| 107-C | RF-31 | Carbohydrate Remelt Tank | 10-A-244 |
| 108-1 | RF-3 | Ethanol Storage Tank | 99-A-082 |
| 108-2 | RF-3B | Ethanol Storage Tank | 10-A-245 |
| 109-1 | RF-11 | Manual Additive Hopper/Feeder | 01-A-880-S2 |
| | RF-13 | Dedusting System 2 | |
| | RF-16 | House Vacuum | |
| Roads | | | |
| P-F-1 | PLN-1 | Plant Roads and Parking Lots | NA |
| Starch | | | |
| 20-A-2 | ST-01 | #1 Bin Storage | NA |
| 20-A-3-1 | ST-20 | Pneu-Vac Blower System | 09-A-710-S1 |
| 20-A-3-3 | ST-21 | House Vacuum | NA |
| 20-A-4 | ST-02 | #2 Bin Storage | NA |
| 20-A-5 | ST-03 | #3 Bin Storage | NA |
| 20-A-7 | ST-04 | #4 Bin Storage | NA |
| 20-A-9 | ST-05 | #5 Bin Storage | NA |
| 20-A-11 | ST-06 | #6 Bin Storage | NA |
| 20-A-13 | ST-07 | #7 Bin Storage | 13-A-073 |
| 20-A-15 | ST-08 | #8 Bin Storage | 98-A-376-S2 |
| 20-A-17 | ST-09 | #9 Bin Storage | 98-A-377-S2 |
| 61-1 | ST-17 | #2 P&M Starch Dryer | 01-A-1031-S1 |
| 61-4 | ST-18 | Corn Starch Flash Dryer #1 | 09-A-633 |
| 61-3 | ST-24 | Building #61 Exhaust Vents | NA |
| 61-5 | | | |
| 63-1 | ST-23 | Palletizer | NA |
| 63-2 | ST-19 | House Vacuum | NA |
| 63-4 | ST-10 | Bulk Starch Loadout | 82-A-075 |
| 63-5 | ST-11 | #1 Packing Room (Bagging) | NA |
| 63-6 | ST-12 | #1 Starch Storage/Packing Bin | NA |
| 63-7 | ST-13 | #2 Starch Storage Bin | 78-A-179 |
| 63-8 | ST-14 | Bagging Room | 85-A-093 |
| 63-10 | ST-15 | #12 Starch Bin | 81-A-152-S1 |
| 63-12 | ST-16 | Reclaim Starch System | 89-A-071 |
| Steam & Co-Gen | | | |
| 112 | 112 | Waste Heat Boiler | 08-A-280-S3 |
| 121 | 121 | CFB Boiler | 06-A-518-P1 |

Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|--|--|
| 122 | 122 | Crusher #1 | 06-A-519-S2 |
| | 122a | Receiving Hopper #1 | |
| | 122b | Receiving Conveyor #1 | |
| | 122c | Receiving Bucket Elevator #1 | |
| 123 | 123 | Crusher #2 | 06-A-520-S2 |
| | 123a | Receiving Hopper #2 | |
| | 123b | Receiving Conveyor #2 | |
| | 123c | Receiving Bucket Elevator #2 | |
| 125 | 125 | Limestone Storage Silo #1 | 06-A-522-S2 |
| 125B | 125B | Limestone Storage Silo #2 | 07-A-1560-S1 |
| 126 | 126 | Ash Silo Conveying System | 06-A-523-S2 |
| 126B | 126B | Ash Silo Conveying System | 07-A-1561-S1 |
| 126C | 126C | Ash Silo Conveying System | 07-A-1562-S1 |
| 126D | 126D | Ash Silo Conveying System | 07-A-1563-S1 |
| 127 | 127 | Ash Silo Bin Vent | 06-A-524-S1 |
| 129 | 129 | Belt Conveyor | 06-A-526-S2 |
| 131 | 131 | Bunker #1 | 06-A-528-S2 |
| 132 | 132 | Bunker #2 | 06-A-529-S2 |
| 133 | 133 | Bunker #3 | 06-A-530-S2 |
| 135 | 135 | Drag Feed Conveyor | 06-A-532-S2 |
| | 135B | Limestone Conveyor Receiving | |
| 200-1 | CG-3 | Dew Point Heater | 02-A-694-P1 |
| 201-1 | CG-4 | Diesel Starting Engine | 02-A-695-P3 |
| 201-2 | CG-2 | Combustion Turbine, Simple Cycle | 02-A-693-P1 |
| 201-5 | 201-5 | Package Boiler | 12-A-200-S2 |
| 201-6 | 201-6 | Package Boiler | 12-A-201-S2 |
| 201-8 | 201-8 | Package Boiler | 12-A-202-S2 |
| 202-1 | CG-1 | Combustion Turbine/Duct Burner, Combined Cycle | 02-A-692-P1 |
| WMD | | | |
| 11-1/3/12 | WMD-09 | WMD Exhaust Vents | NA |
| 11-13 | WMD-05 | Reclaim Starch | 98-A-374 |
| Wastewater | | | |
| 71-2 | WW-01 | Lime Storage Silo #1 | 89-A-053-S1 |
| 71-8 | WW-04 | #1 Aeration | NA |
| 71-9 | WW-05 | #2 Aeration | NA |
| 71-10 | WW-07 | Lime Storage Silo #2 | 09-A-282 |
| 71-11 | WW-06 | #3 Surge & Equalization | NA |

Insignificant Activities Equipment List

| Insignificant Emission Unit Number | Insignificant Emission Unit Description |
|------------------------------------|---|
| AB-11 | Dilute HCl Acid Tank |
| AB-12 | IX HCl Acid Day Tank |
| AB-13 | Spent Carbon Truck Loading |
| AB-20 | Carbon Tank Dump Station |
| AB-5 | HCl Measuring CSU Sacch. Tank |
| AB-6 | Carbon Bag Dump |
| AB-7 | HCl Measuring Tube "A" |
| BCS-5 | HCl Unloading |
| FH-29 | Feedhouse Exhaust Vents |
| G-10 | #2 MR |
| G-11 | #1 MR |
| G-13 | Upriver Loadout Hose |
| G-14 | Downriver Loadout Hose |
| G-15 | Mud Tank |
| G-16 | HSW Tank |
| G-19 | B&K Flash Cooler |
| G-21 | Hot Condensate Tank |
| G-9 | Zarembo Evap. Vacuum Jet |
| INS-1 | Diatomaceous Earth Loadout |
| INS-2 | Maintenance Welding |
| INS-3 | 3 Aeration Tanks |
| INS-4 | Surge Equalization Tanks |
| LR-1 | Air Makeup Heater (0.5 MMBtu/hr.) |
| LR-2 | Upriver Heater (0.1 MMBtu/hr.) |
| LR-3 | Down River Heater (0.1 MMBtu/hr.) |
| LR-4 | Water Heater (0.3 MMBtu/hr.) |
| MN-1 | Aerosol Painting Room Vent |
| RC-1 | HCl Day Tank |
| RC-12 | HCl Unloading |
| RC-6 | HCl Day Tank |
| RF-1 | HCl Day Tank |
| WMD-6 | Upriver Tank Vent |
| WMD-7 | Downriver Tank Vent |
| WMD-8 | WMD Chemical Room |
| RC-21 | Storage Tank |
| RC-22 | Storage Tank |
| RC-23 | Storage Tank |
| RC-24 | Storage Tank |
| 51-1 | Gluten RVF Drum Ventilation |
| 51-2 | Gluten RVF Drum Ventilation |

Insignificant Activities Equipment List

| Insignificant Emission Unit Number | Insignificant Emission Unit Description |
|------------------------------------|---|
| ET-11 | Downriver Cooling Tower |
| ET-12 | Upriver Cooling Tower |
| ET-13 | Cooling Tower |
| RC-10 | #2 Roof Cooling Tower |
| RC-11 | #1 Ground Cooling Tower |
| RC-13 | #3 Cooling Tower |
| RC-14 | #4 Cooling Tower |
| RF-T101 | Cooling Tower – Tower 1 |
| RF-T102 | Cooling Tower – Tower 1 |
| RF-T201 | Cooling Tower – Tower 2 |
| RF-T202 | Cooling Tower – Tower 2 |
| RF-T203 | Cooling Tower – Tower 2 |
| RF-T204 | Cooling Tower – Tower 2 |
| RF-T205 | Cooling Tower – Tower 2 |
| 106-1 | Refinery Cooling Tower |
| WWTP-1 | WW Treatment Plant Cooling Tower |
| 17-1 | Refinery AB CSV Manual Packing |

II. Plant-Wide Conditions

Facility Name: Roquette America, Inc.
Permit Number: 08-TV-006R1

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

Permit Duration

The term of this permit is: Five (5) years from permit issuance
Commencing on: September 27, 2016
Ending on: September 26 26, 2021

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

Emission Limits

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

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

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

Particulate Matter:

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

Fugitive Dust: Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved

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

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

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

Facility-Wide Limits

Process Throughput

1. The grind rate for the facility (plant number 56-01-009) shall not exceed 46.556 million bushels per 12-month rolling period.

Reporting & Record keeping:

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

1. Determine the cumulative amount of grind (in bushels/yr.) for the facility (plant number 56-01-009) on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permits 01-A-366, 01-A-367-S2

NESHAP:

Sources located at this facility are subject to 40 CFR 63 Subpart DDDDD – National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, and Institutional Boilers and Process Heaters. See "Emission Point-Specific Conditions" for specific emission units subject to the Subpart.

Authority for Requirement: 40 CFR 63 Subpart DDDDD

III. Emission Point-Specific Conditions

Facility Name: Roquette America, Inc.

Permit Number: **08-TV-006R1**

Barge Terminal Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|----------------------------------|--|
| 67-1 | BT-1 | Storage Bins 1&2 | 03-A-930-S2 |
| 67-2 | BT-2 | Storage Bins 3&4 | 03-A-931-S2 |
| 67-3 | BT-3 | Storage Bins 5&6 | 03-A-932-S2 |
| 67-A | BT-7 | Barge Terminal Unloading | 75-A-279 |
| 67-F-1 | BT-9 | Grain Dump Pit | NA |
| 67-F-2 | BT-10 | Grain Bin Unloading Conveyor | NA |
| | BT-11 | Grain Bin Unloading Conveyor | NA |
| 67-F-3 | BT-12 | Barge Loading Conveyor | NA |
| 67-F-4 | BT-13 | Barge Filling | NA |
| 67-F-5 | BT-14 | Truck Loading #1 Reclaim Leg | NA |
| 67-F-6 | BT-15 | Truck Loading #2 Reclaim Leg | NA |
| 72-F-1 | BT-8 | Flat Storage Building | NA |

Emission Point ID Numbers: 67-1, 67-2, & 67-3

Associated Equipment

| Emission Point | Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------|---------------|---------------------------|-------------------|------------------------|----------------|---------------------|
| 67-1 | BT-1 | Storage Bins 1&2 | BT-01: Baghouse | Grain/Grain Byproducts | 600 tons/hr. | 03-A-930-S2 |
| 67-2 | BT-2 | Storage Bins 3&4 | BT-02: Baghouse | Grain/Grain Byproducts | 600 tons/hr. | 03-A-931-S2 |
| 67-3 | BT-3 | Storage Bins 5&6 | BT-03: Baghouse | Grain/Grain Byproducts | 600 tons/hr. | 03-A-932-S2 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): No Visible Emissions⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permits 03-A-930-S2, 03-A-931-S2, 03-A-932-S2
567 IAC 23.3(2)"d"

⁽¹⁾ If visible emissions are observed other than startup, shutdown, or malfunction a stack test may be required to demonstrate compliance with the particulate standards. This standard is in lieu of an initial compliance test for PM & PM₁₀.

Pollutant: PM₁₀

Emission Limit(s): 1.29 lb./hr.

Authority for Requirement: Iowa DNR Construction Permits 03-A-930-S2, 03-A-931-S2, 03-A-932-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permits 03-A-930-S2, 03-A-931-S2, 03-A-932-S2
567 IAC 23.4(7)

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

| Emission Point | 67-1 | 67-2 | 67-3 |
|---|-----------------------|-----------------------|-----------------------|
| Stack Height, (ft., from the ground) | 60 | 60 | 63 |
| Stack Opening, (inches, dia.) | 20 | 20 | 32 |
| Exhaust Flow Rate (scfm) | 1,300 | 1,300 | 1,300 |
| Exhaust Temperature (°F) | 70 | 70 | 70 |
| Discharge Style | Vertical Unobstructed | Vertical Unobstructed | Vertical Unobstructed |
| Authority for Requirement | 03-A-930-S2 | 03-A-931-S2 | 03-A-932-S2 |

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

Monitoring Requirements

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

Opacity:

Visible emissions shall be observed on a weekly basis to ensure none occur when the emission unit on this emission point is at or near full capacity. If visible emissions are 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 visible emissions readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 67-A

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| BT-7 | Barge Terminal Unloading | BT-07: Baghouse | Pellets/Grain | 600 tons/hr. | 75-A-279 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 75-A-279
567 IAC 23.4(7)

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
(Required for Particulate Matter)

Authority for Requirement: 567 IAC 22.108(3)

**Compliance Assurance Monitoring Plan
CAM Plan for EP 67-A; Baghouse (BT-7)**

I. Background

A. Emissions Units

Description: Barge Terminal Dust Collector
 Identification: BT-07
 Facility: Roquette America, Inc.
 1417 Exchange Street
 Keokuk, IA 52632

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Iowa DNR Construction Permit 75-A-279
 Particulate emission limit: PM: 0.1 gr/scf
 Opacity emission limit: 40%
 Current Monitoring requirements: Weekly visible emission checks

C. Control Technology: Baghouse

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table 1.

Note: An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion is a deviation that must be reported in the Semi-Annual Monitoring Report and Annual Compliance Certification Report.

Table 1. Monitoring Approach

| General Criteria | |
|----------------------|--|
| I. Indicator | Visible emissions |
| Measurement Approach | Visible emissions from the control device exhaust while the emission unit is operating. |
| II. Indicator Range | No visible emissions shall be observed, except during startup, shutdown, or cleaning of the control equipment. Visible emissions require corrective action and recordkeeping requirements. |
| QIP Threshold | The QIP threshold is six excursions in a six month period. |

| | |
|---------------------------------------|---|
| III. Performance Criteria | |
| A. Data Representativeness | Visible emission are a key indicator that a baghouse is operating properly. Visible emissions occur when material can be seen exiting a baghouse's waste stream. |
| B. Verification of Operational Status | Records of visible emission checks will be maintained for five years. |
| C. QA/QC Practices and Criteria | The observer will be trained to detect visible emissions, but will not necessarily be Method 9 certified. Baghouse will be maintained as outlined in the facility's operation and maintenance plan. |
| D. Monitoring Frequency | <p>Visible emission readings shall be conducted daily during a period when the emission unit on this emission point is in operation.</p> <p>If visible emissions are detected, corrective action shall be taken as soon as possible, but no later than eight hours from observation. If corrective action does not return observation to no visible emissions, then a Method 9 observation will be required.</p> <p>If weather conditions prevent the observer from conducting a visible emission observation, the observer shall note such conditions on observation sheet. At least three attempts shall be made to retake readings at approximately two hour intervals throughout the day. If weather prohibits all three attempts, an observation shall be made on the next operating day that weather permits.</p> |
| E. Data Collection Procedures | <p>Electronic or hard copy of daily visible emission readings will be available upon request.</p> <p>Corrective actions resulting from excursions will be recorded.</p> |
| IV. Justification | Visible emission detection was selected as the performance indicator because it demonstrates the proper operating conditions of this control device and therefore the optimal PM control performance. |

Emission Point ID Numbers: 67-F-1, 67-F-2, 67-F-3, 67-F-5, 67-F-6, 72-F-1

Associated Equipment

| Emission Point | Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|-----------------------|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| 67-F-1 | BT-9 | Grain Dump Pit | BT-07: Baghouse | Pellets/Grain | 600 tons/hr. | NA |
| 67-F-2 | BT-10 | Grain Bin Unloading Conveyor | NA | Pellets/Grain | 300 tons/hr. | NA |
| | BT-11 | Grain Bin Unloading Conveyor | NA | Pellets/Grain | 300 tons/hr. | |
| 67-F-3 | BT-12 | Barge Loading Conveyor | NA | Pellets/Grain | 600 tons/hr. | NA |
| 67-F-4 | BT-13 | Barge Filling | NA | Pellets/Grain | 600 tons/hr. | NA |
| 67-F-5 | BT-14 | Truck Loading #1 Reclaim Leg | NA | Pellets/Grain | 600 tons/hr. | NA |
| 67-F-6 | BT-15 | Truck Loading #2 Reclaim Leg | NA | Pellets/Grain | 600 tons/hr. | NA |
| 72-F-1 | BT-8 | Flat Storage Building | NA | Pellets/Grain | 450 tons/hr. | NA |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: 567 IAC 23.4(7)

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Bulk Chemical Storage Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|---|--|
| 71-4 | BCS-4 | Sulfur Burner/Sulfurous Acid Production | 08-A-312-S1 |
| | BCS-4A | Railcar Vent | |
| 71-5 | BCS-1 | HCl Storage Tank Working And Breathing Losses | 03-A-026-S4 |
| | BCS-2 | HCl Storage Tank Working And Breathing Losses | |
| | BCS-3 | HCl Storage Tank Working And Breathing Losses | |

Emission Point ID Number: 71-4**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|---|--------------------------|---------------------|-----------------------|----------------------------|
| BCS-4 | Sulfur Burner/Sulfurous Acid Production | BCS-4: Scrubber | Sulfur | 0.15 tons/hr. | 08-A-312-S1 |
| BCS-4A | Rail Car Vent | | | | |

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 08-A-312-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 08-A-312-S1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 08-A-312-S1
567 IAC 23.3(2)"e"

Operational Limits & Requirements

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

Control equipment parameters:

1. Packed Bed Scrubber (BCS-4) scrubbant flowrate shall be maintained within appropriate range as specified by manufacturer or operator.
2. Packed Bed Scrubber (BCS-4) scrubbant pH shall be maintained within appropriate range as specified by manufacturer or operator
3. Maintain Packed Bed Scrubber (BCS-4) according to manufacturer specifications and maintenance schedule.

Reporting & Record keeping:

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

1. The permittee shall collect and record the scrubbant flowrate of the Packed Bed Scrubber (BCS-4) in gallons per minute on a continuous basis.
2. The permittee shall collect and record the pH of the scrubbant in the Packed Bed Scrubber (BCS-4) in standard units, at least twice per day.
3. The permittee shall maintain a record of the minimum scrubbant flowrate and maximum scrubbant flowrate as recommended by the manufacturer or operator for Packed Bed Scrubber (BCS-4) in gallons per minute.
4. The permittee shall maintain a record of the minimum scrubbant pH and maximum scrubbant pH in standard units as recommended by the manufacturer or operator for Packed Bed Scrubber (BCS-4).
5. Maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of Packed Bed Scrubber (BCS-4).

Authority for Requirement: Iowa DNR Construction Permit 08-A-312-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 38.6

Stack Opening, (inches, dia.): 8

Exhaust Flow Rate (scfm): 550

Exhaust Temperature (°F): 100

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 08-A-312-S1

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

Monitoring Requirements

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

Stack Testing:

Pollutant – SO₂

Stack Test to be Completed by – 9/26/2018

Test Method – 40 CFR 60, Appendix A, Method 6C

Authority for Requirement – 567 IAC 22.108(3)"b"

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
(Required for SO₂ emissions)

Authority for Requirement: 567 IAC 22.108(3)

**Compliance Assurance Monitoring Plan
CAM Plan for EP 71-4; Scrubber (CE BCS-4)**

I. Background

A. Emissions Units

Description: Sulfur Burner
Identification: EU BCS-4
Facility: Roquette America, Inc.
1417 Exchange Street
Keokuk, IA 52632

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Iowa DNR Construction Permit 08-A-312-S1
SO₂: 500 ppm
PM: 0.1 gr/dscf
Opacity: 40%
Current Monitoring requirements: Continuously record scrubber flow rate and record pH twice per day.

C. Control Technology: Scrubber

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table 1. The selected performance indicators are control device scrubber liquid feed rate and scrubber inlet water temperature.

Note: An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion is a deviation that must be reported in the Semi-Annual Monitoring Report and Annual Compliance Certification Report.

Table 1. Monitoring Approach

| General Criteria | Indicator 1 | Indicator 2 |
|---------------------------------------|---|---|
| I. Indicator | Scrubber Flow Rate | Scrubber pH |
| Measurement Approach | Scrubber flow rate will be measured by a digital recorder or other device. | Scrubber pH will be measured by a digital recorder or other device. |
| II. Indicator Range | Scrubber flow rate will be checked daily to ensure liquid feed rate remains between 284 and 500 l/min, except during startup, shutdown, or cleaning of control equipment.. | Scrubber pH will be checked daily to ensure pH remains between 6.0 and 14.0, except during startup, shutdown, or cleaning of control equipment. |
| QIP Threshold | The QIP threshold is six excursions in a six month period. | The QIP threshold is six excursions in a six month period. |
| III. Performance Criteria | | |
| A. Data Representativeness | The scrubber is designed to operate at maximum control efficiency between specified flow rates. If the flow rate drifts outside the optimal efficiency range, this is an indication of the potential for increased SO ₂ emissions. | The scrubber is designed to operate at maximum control efficiency when pH is within a specified range. If the pH drifts outside the optimal efficiency range, this is an indication of the potential for increased SO ₂ emissions. |
| B. Verification of Operational Status | Records of liquid flow rate readings will be maintained for five years. | Records of pH readings will be maintained for five years. |
| C. QA/QC Practices and Criteria | Recording devices (digital recorder or otherwise) will be maintained using procedures that take into account manufacturer's specifications. Scrubber will be maintained as outlined in the facility's operation and maintenance plan. | Recording devices (digital recorder or otherwise) will be maintained using procedures that take into account manufacturer's specifications. Scrubber will be maintained as outlined in the facility's operation and maintenance plan. |

| | Indicator 1 | Indicator 2 |
|-------------------------------|--|--|
| D. Monitoring Frequency | <p>The liquid flow rate readings shall be recorded continuously on a digital recorder or other system. Monitored daily for liquid flow rates outside indicator values when the emission unit on this emission point is in operation.</p> <p>If liquid flow rate falls outside the indicator specified above, corrective action shall be taken as soon as possible, but no later than eight hours from observation.</p> | <p>The pH readings shall be recorded continuously on a digital recorder or other system. Monitored daily for pH values outside indicator values when the emission unit on this emission point is in operation.</p> <p>If pH rises above the indicator specified above, corrective action shall be taken as soon as possible, but no later than eight hours from observation.</p> |
| E. Data Collection Procedures | <p>Electronic or hard copy of daily scrubber liquid flow rate readings (on strip chart or otherwise) will be available upon request.</p> <p>Corrective actions resulting from excursions will be recorded.</p> | <p>Electronic or hard copy of daily inlet pH readings (on strip chart or otherwise) will be available upon request.</p> <p>Corrective actions resulting from excursions will be recorded</p> |
| IV. Justification | <p>Liquid flow rate was selected as one of the performance indicators because it demonstrates the proper operating conditions of this control device and therefore the optimal SO₂ control performance.</p> | <p>pH was selected as one of the performance indicators because it demonstrates the proper operating conditions of this control device and therefore the optimal SO₂ control performance.</p> |

Emission Point ID Number: 71-5

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Storage Capacity | Construction Permit |
|---------------|---|---------------------------|--------------|------------------|---------------------|
| BCS-1 | HCl Storage Tank Working And Breathing Losses | 71-5: Packed Bed Scrubber | HCl | 36,000 gallons | 03-A-026-S4 |
| BCS-2 | HCl Storage Tank Working And Breathing Losses | | HCl | 36,000 gallons | |
| BCS-3 | HCl Storage Tank Working And Breathing Losses | | HCl | 36,000 gallons | |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 03-A-026-S4
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 1.90 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 03-A-026-S4

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 03-A-026-S4
567 IAC 23.3(2)"a"

Operational Limits & Requirements

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

Process throughput:

1. Tank (BCS 1), Tank (BCS 2), Tank (BCS 3) are limited to storing hydrochloric acid (HCl) only.

Control equipment parameters:

1. Packed Bed Scrubber (BCS-1) liquor flowrate shall be maintained within range as specified by manufacturer or operator.

2. Packed Bed Scrubber (BCS-1) liquor pH shall be maintained within range as specified by manufacturer or operator.
3. Maintain Packed Bed Scrubber (BCS-1) according to manufacturer specifications and maintenance schedule.

Reporting & Record keeping:

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

1. Retain Material Safety Data sheets of material stored in Tank (BCS 1), Tank (BCS 2), Tank (BCS 3).
2. The permittee shall collect and record the liquor flowrate of the Packed Bed Scrubber (BCS-1) in gallons per minute on a continuous basis.
3. The permittee shall collect and record the pH of the liquor in the Packed Bed Scrubber (BCS-1) in standard units, at least twice per day.
4. The permittee shall maintain a record of the minimum liquor flowrate and maximum liquor flowrate as recommended by the manufacturer or operator for Packed Bed Scrubber (BCS-1) in gallons per minute.
5. The permittee shall maintain a record of the minimum liquor pH and maximum liquor pH in standard units as recommended by the manufacturer or operator for Packed Bed Scrubber (BCS-1).
6. Maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of Packed Bed Scrubber (BCS-1).

Authority for Requirement: Iowa DNR Construction Permit 03-A-026-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 30

Stack Opening, (inches, dia.): 16

Exhaust Flow Rate (scfm): 3,500

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Obstructed

Authority for Requirement: Iowa DNR Construction Permit 03-A-026-S4

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Elevator Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|------------------------------------|--|
| 58-3 | EL-4 | Surge Bin | 81-A-148-S1 |
| 58-5 | EL-10 | Rail Dump Pit | 84-A-029-S2 |
| | EL-11 | Upriver Truck Dump Pit | |
| | EL-15 | Corn Screenings Loadout | |
| 58-F-4 | EL-11 | Upriver Truck Dump Pit Fugitives | NA |
| 58-F-5 | EL-10 | Rail Dump Pit Fugitives | NA |
| 58-F-6 | EL-15 | Corn Screenings Loadout Fugitives | NA |
| 58-8 | EL-5 | Vacuum System | NA |
| 58-11 | EL-2 | Upriver Dump Pit Belt Legs | 83-A-151-S1 |
| 58-14 | EL-6 | Elevator Downriver Grain Receiving | 81-A-147-S1 |
| 58-F-1 | EL-7 | Corn Conveying | 03-A-041 |
| 58-F-2 | EL-12 | Downriver Belly Dump Pit | NA |
| 58-F-3 | EL-14 | Overhead Belt Conveyor | 03-A-040 |
| 58-2/P | EL-9 | Elevator Exhaust Vents | NA |
| 58-R/BA | EL-8 | Corn Bins #14-30, 49-66 | NA |

Emission Point ID Number: 58-3

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|---------------|---------------------------|-------------------|--------------|----------------|---------------------|
| EL-4 | Surge Bin | EL-4: Baghouse | Corn | 5 tons/hr. | 81-A-148-S1 |

Applicable Requirements

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

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

Pollutant: Opacity (Federal)

Emission Limit(s): 0%

Authority for Requirement: 567 IAC 23.1(2)"ooo"

Pollutant: Opacity (State)

Emission Limit(s): 20%

Authority for Requirement: Iowa DNR Construction Permit 81-A-148-S1
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 0.03 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 81-A-148-S1

Pollutant: Particulate Matter (Federal)

Emission Limit(s): 0.01 gr/dscf

Authority for Requirement: 567 IAC 23.1(2)"ooo"

Pollutant: Particulate Matter (State)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 81-A-148-S1
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 30
- Stack Opening, (inches): 3.5 x 3.5
- Exhaust Flow Rate (scfm): 180
- Exhaust Temperature (°F): 70
- Discharge Style: NA
- Authority for Requirement: Iowa DNR Construction Permit 81-A-148-S1

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

Monitoring Requirements

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

Opacity

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

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

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 58-5**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| EL-10 | Rail Dump Pit | EL-1: Baghouse | Corn | 840 tons/hr. | 84-A-029-S2 |
| EL-11 | Upriver Truck Dump Pit | | Corn | 840 tons/hr. | |
| EL-15 | Corn Screenings Loadout | | Corn | 3,500 bushels/hr. | |

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 84-A-029-S2
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 21.54 lb/hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 84-A-029-S2
567 IAC 23.4(7)

Operational Limits & Requirements

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

Control equipment parameters:

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

Reporting & Record keeping:

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

1. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 84-A-029-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 66
Stack Opening, (inches, dia.): 48
Exhaust Flow Rate (scfm): 33,625
Exhaust Temperature (°F): 70
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 84-A-029-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

**Compliance Assurance Monitoring Plan
CAM Plan for EP 58-5; Baghouse (EL-1) and EP 58-F-5**

I. Background

A. Emissions Units

Emission Point Description: Upriver Phase II MAC Dust Collector 58-5

Emission Unit Description:

Upriver Truck Dump Pit EL-11

Rail Pit EL-10

Corn Screening Loadout EL-15

Identification: EL-11, EL-10, EL-15

Facility: Roquette America, Inc.
1417 Exchange Street
Keokuk, IA 52632

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Iowa DNR Construction Permit 84-A-029-S1 for EP 58-5

Particulate emission limit: PM: 21.54 lb/hr.

Opacity emission limit: 40%

Current Monitoring requirements: Weekly opacity (NVE) checks

C. Control Technology: Baghouse

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table 1. EP 58-5 and EP 58-F-5 represent emissions from the Upriver Truck Dump Pit (EL-11), the Rail Dump Pit (EU-10) and the Corn Screenings Loadout (EL-15). Uncontrolled emissions from the Emission Units are captured (90% capture rate) and routed through a baghouse (EL-1). The baghouse (EL-1) also receives exhaust from several insignificant sources. EP 58-F-5 was created intending to represent fugitive emissions that are not captured (conservatively estimated at 10% of total emissions) for emission inventory purposes. This CAM plan incorporates both emission points.

Note: An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion is a deviation that must be reported in the Semi-Annual Monitoring Report and Annual Compliance Certification Report.

Table 1. Monitoring Approach

| | |
|---------------------------------------|---|
| General Criteria | |
| I. Indicator | Differential pressure across the control device |
| Measurement Approach | Differential pressure measured across the control device by a differential pressure gauge. |
| II. Indicator Range | The facility shall provide applicable indicator pressure drop range to the Department within 180 days of permit issuance. ⁽¹⁾ -OR- Pressure drop will be checked daily when operating to ensure that the pressure drop is in the range of 0.5 to 6.0 inches of water during operation of the unit, except during periods of startup, shutdown, or cleaning of control equipment. |
| QIP Threshold | The QIP threshold is 6 excursions in a 6 month period. |
| III. Performance Criteria | |
| A. Data Representativeness | Pressure drop less than 0.5 inches of water or greater than 6.0 inches of water would indicate decrease in the performance the baghouse and potentially indicate an increase of particulate emissions. |
| B. Verification of Operational Status | Records of pressure drop readings will be maintained for five years. |
| C. QA/QC Practices and Criteria | Pressure gauges will be maintained using procedures that take into account manufacturer's specifications. Baghouse will be maintained as specified in Title V permit. |
| D. Monitoring Frequency | The pressure drop readings shall be conducted daily during a period when the emission unit on this emission point is in operation. If pressure drop falls out of the range specified above, corrective action shall be taken as soon as possible, but no later than eight hours from observation. |
| E. Data Collection Procedures | Electronic or hard copy of daily differential pressure readings will be available upon request. Corrective actions resulting from excursions will be recorded. |
| IV. Justification | Pressure differential was selected as the performance indicator because it demonstrates the proper operating conditions of this control device and therefore the optimal PM control performance. |

⁽¹⁾ 40 CFR 64.4"e"

Emission Point ID Numbers: 58-F-4, 58-F-5, 58-F-6

Associated Equipment

| Emission Point | Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|-----------------------|----------------------|-----------------------------------|---------------------|-----------------------|----------------------------|
| 58-F-4 | EL-11 | Upriver Truck Dump Pit Fugitives | Corn | 840 tons/hr. | NA |
| 58-F-5 | EL-10 | Rail Dump Pit Fugitives | Corn | 840 tons/hr. | NA |
| 58-F-6 | EL-15 | Corn Screenings Loadout Fugitives | Corn | 840 tons/hr. | NA |

Applicable Requirements

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

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

Pollutant: Fugitive Dust

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 58-8

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| EL-5 | Vacuum System | EL-5: Baghouse | Corn Dust | 1 ton/hr. | NA |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: 567 IAC 23.4(7)

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 58-11

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|---------------|----------------------------|-------------------|--------------|----------------|---------------------|
| EL-2 | Upriver Dump Pit Belt Legs | EL-2: Baghouse | Corn | 840 tons/hr. | 83-A-151-S1 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 83-A-151-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 21.05 lb/hr., 0.1 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 83-A-151-S1
567 IAC 23.4(7)

Operational Limits & Requirements

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

Control equipment parameters:

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

Reporting & Record keeping:

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

1. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 83-A-151-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 66
- Stack Opening, (inches, dia.): 48
- Exhaust Flow Rate (scfm): 33,500
- Exhaust Temperature (°F): 80
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: Iowa DNR Construction Permit 83-A-151-S1

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

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Compliance Assurance Monitoring Plan
CAM Plan for EP 58-11; Baghouse (EL-2) and EP 58-F-4**

I. Background

A. Emissions Units

Description: Downriver Phase I MAC Dust Collector
Identification: EL-2
Facility: Roquette America, Inc.
1417 Exchange Street
Keokuk, IA 52632

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Iowa DNR Construction Permit 83-A-151 for
EP 58-11
Particulate emission limit: PM: 21.05 lb/hr.
Opacity emission limit: 40%
Current Monitoring requirements: Weekly opacity (NVE) checks

C. Control Technology: Baghouse

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table 1. EP 58-11 and EP 58-F-4 represent emissions from the same source, the Upriver Truck Dump Pit. Uncontrolled emissions from the Upriver Truck Dump Pit are captured (90% capture rate) and routed through a baghouse (EL-2). The baghouse (EL-2) also receives exhaust from several insignificant sources. EP 58-F-4 was created intending to represent fugitive emissions that are not captured (conservatively estimated at 10% of total emissions) for emission inventory purposes. This CAM plan incorporates both emission points.

Note: An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion is a deviation that must be reported in the Semi-Annual Monitoring Report and Annual Compliance Certification Report.

Table 1. Monitoring Approach

| | |
|---------------------------------------|---|
| General Criteria | |
| I. Indicator | Differential pressure across the control device |
| Measurement Approach | Differential pressure measured across the control device by a differential pressure gauge. |
| II. Indicator Range | The facility shall provide applicable indicator pressure drop range to the Department within 180 days of permit issuance. ⁽¹⁾ -OR- Pressure drop will be checked daily when operating to ensure that the pressure drop is in the range of 0.5 to 6.0 inches of water during operation of the unit, except during periods of startup, shutdown, or cleaning of control equipment. |
| QIP Threshold | The QIP threshold is 6 excursions in a 6 month period. (Most have QIP threshold as six excursions in a six month period. |
| III. Performance Criteria | |
| A. Data Representativeness | Pressure drop less than 0.5 inches of water or greater than 6.0 inches of water would indicate decrease in the performance the baghouse and potentially indicate an increase of particulate emissions. |
| B. Verification of Operational Status | Records of pressure drop readings will be maintained for five years. |
| C. QA/QC Practices and Criteria | Pressure gauges will be maintained using procedures that take into account manufacturer's specifications. Baghouse will be maintained as specified in Title V permit. |
| D. Monitoring Frequency | The pressure drop readings shall be conducted daily during a period when the emission unit on this emission point is in operation. If pressure drop falls out of the range specified above, corrective action shall be taken as soon as possible, but no later than eight hours from observation. |
| E. Data Collection Procedures | Electronic or hard copy of daily differential pressure readings will be available upon request. Corrective actions resulting from excursions will be recorded. |
| IV. Justification | Pressure differential was selected as the performance indicator because it demonstrates the proper operating conditions of this control device and therefore the optimal PM control performance. |

⁽¹⁾ 40 CFR 64.4"e"

Emission Point ID Number: 58-14

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|------------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| EL-6 | Elevator Downriver Grain Receiving | EL-6: Baghouse | Corn | 170 tons/hr. | 81-A-147-S1 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 81-A-147-S1
567 IAC 23.1(2)"ooo"

Pollutant: PM₁₀

Emission Limit(s): 0.52 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 81-A-147-S1

Pollutant: Particulate Matter (Federal)

Emission Limit(s): 0.01 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 81-A-147-S1
567 IAC 23.1(2)"ooo"

Pollutant: Particulate Matter (State)

Emission Limit(s): 5.57 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 81-A-147-S1

Operational Limits & Requirements

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

Process throughput:

1. The throughput of this equipment shall not exceed 170 tons per hour.

Reporting & Record keeping:

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

1. At the end of each day, record the amount, in tons, of material processed by this equipment of the previous day.
2. At the end of each day, record the number of hours this equipment operated over the previous day.
3. For each day, calculate the daily average hourly production rate by dividing the amount of material processed on that day by the number of hours this equipment operated on that day. This calculation shall be performed no later than 7 days after the end of the month.

Authority for Requirement: Iowa DNR Construction Permit 81-A-147-S1

NSPS:

This equipment is subject to the New Source Performance Standard (NSPS) for Grain Elevators (40 CFR 60 Subpart DD).

Authority for Requirement: 567 IAC 23.1(2)"ooo"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 31

Stack Opening, (inches): 36 x 24

Exhaust Flow Rate (scfm): 20,500

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 81-A-147-S1

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

Monitoring Requirements

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

Opacity

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. The facility shall use EPA Method 9 with a certified smoke reader for the monitoring method.

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.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 58-F-1

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| EL-7 | Corn Conveying | Corn | 220 tons/hr. | 03-A-041 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 03-A-041
567 IAC 23.1(2)"ooo"

Pollutant: PM₁₀

Emission Limit(s): 0.036 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 03-A-041

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 03-A-041
567 IAC 23.4(7)

Operational Limits & Requirements

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

NSPS:

This equipment is subject to the New Source Performance Standard (NSPS) for Grain Elevators (40 CFR 60 Subpart DD).

Authority for Requirement: 567 IAC 23.1(2)"ooo"

Monitoring Requirements

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

Opacity

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. The facility shall use EPA Method 9 with a certified smoke reader for the monitoring method.

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.

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: 58-F-2**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| EL-12 | Downriver Belly Dump Pit | EL-12: Dust Collector | Corn | 560 tons/hr. | NA |

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

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

Pollutant: Opacity

Emission Limit(s): 5%

Authority for Requirement: 40 CFR 60.302(c)(1) Standards of Performance for Grain Elevators
567 IAC 23.1(2)"ooo"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7)

Operational Limits & Requirements

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

NSPS:

This equipment is subject to the New Source Performance Standard (NSPS) for Grain Elevators (40 CFR 60 Subpart DD).

Authority for Requirement: 567 IAC 23.1(2)"ooo"

Monitoring Requirements

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

Opacity

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. The facility shall use EPA Method 9 with a certified smoke reader for the monitoring method.

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.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 58-F-3

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| EL-14 | Overhead Belt Conveyor | Corn | 840 tons/hr. | 03-A-040 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 03-A-040
567 IAC 23.1(2)"ooo"

Pollutant: PM₁₀

Emission Limit(s): 0.14 lb/hr.

Authority for Requirement: Iowa DNR Construction Permit 03-A-040

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 03-A-040
567 IAC 23.4(7)

Operational Limits & Requirements

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

NSPS:

This equipment is subject to the New Source Performance Standard (NSPS) for Grain Elevators (40 CFR 60 Subpart DD).

Authority for Requirement: 567 IAC 23.1(2)"ooo"

Monitoring Requirements

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

Opacity

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. The facility shall use EPA Method 9 with a certified smoke reader for the monitoring method.

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.

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 Numbers: 58-2/P & 58-R/BA

Associated Equipment

| Emission Point | Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|-----------------------|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| 58-2/P | EL-9 | Elevator Exhaust Vents | Corn | 220 tons/hr. | NA |
| 58-R/BA | EL-8 | Corn Bins #14-30, 49-66 | Corn | 1400 tons/hr. | NA |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7)

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Feedhouse Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|---|--|
| 51-4 | FH-1 | Gluten Ring Dryer | 01-A-366 |
| 51-5 | FH-2 | Gluten Meal Cooling | 01-A-367-S2 |
| 59-B7 | FH-32 | Fiber Press | NA |
| 59C-F-1 | FH-30 | Rail Car Loading | NA |
| 59-11 | FH-25 | Corn Transfer | 86-A-109 |
| 74-E | FH-31 | Fiber Press | 82-A-071 |
| 138-04 | FH-05N | Hammer Mill | 11-A-061-S1 |
| 138-06 | FH-08N | #4 Pellet Cooler | 11-A-062-S2 |
| | FH-09N | #3 Pellet Cooler | |
| | FH-43N | Dry Feed Pneumatic Conveyor | |
| 138-10 | FH-31N | Hammer Mill | 13-A-034 |
| 138-11 | FH-32N | Pellet Cooler Bucket Elevator (LC51) | 13-A-035 |
| | FH-33N | Bucket Elevator (MX53) | |
| | FH-34N | Conveyor (MX54) | |
| | FH-35N | Bucket Elevator (MX55) | |
| | FH-36N | Conveyor (MP52) | |
| | FH-37N | Conveyor (MP53) | |
| | FH-38N | Conveyor (MP54) | |
| | FH-39N | Conveyor (MP55) | |
| | FH-40N | Silo (MX100) | |
| 139-1 | FH-10N | Fiber Steam Tube Dryer, 2 Stages | 11-A-066-S1 |
| 139-2 | FH-10N | Fiber Steam Tube Dryer, 2 Stages Bypass | 11-A-067-S2 |
| 140-1 | FH-41N | Gluten Truck Loadout | 11-A-068-S1 |
| | FH-42N | Pellet Truck Loadout | |
| 140-2 | FH-13N | #1 Pellet Loadout Bin | 11-A-069-S1 |
| 140-3 | FH-14N | #2 Pellet Loadout Bin | 11-A-070-S1 |
| 140-4 | FH-15N | Gluten Loadout Bin | 11-A-071-S2 |

Emission Point ID Number: 51-4

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|-----------------------|-------------------------------|----------------------------|
| FH-1 | Gluten Ring Dryer | FH-1: Scrubber | Gluten Natural Gas | 9.75 tons/hr. 40 MMBtu/hr. | 01-A-366 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-366
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 6.4 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 01-A-366

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-366
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 9.0 lb./hr., 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 01-A-366
567 IAC 23.3(3)"e"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 200
- Stack Opening, (inches, dia.): 28
- Exhaust Flow Rate (scfm): 24,600
- Exhaust Temperature (°F): 175
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: Iowa DNR Construction Permit 01-A-366

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

Monitoring Requirements

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

Stack Testing:

- Pollutant – PM₁₀
- Stack Test to be Completed by – 9/26/2018
- Test Method – 40 CFR 51, Appendix M, 201A w/ 202
- Authority for Requirement – 567 IAC 22.108(3)"b"

- Pollutant – Particulate Matter
- Stack Test to be Completed by – 9/26/2018
- Test Method – 40 CFR 60, Appendix A Method 5 w/ 40 CFR 51, Appendix M Method 202
- Authority for Requirement – 567 IAC 22.108(3)"b"

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
(required for PM₁₀, Particulate Matter, and SO₂ emissions)

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 51-5

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|---------------|---------------------------|-------------------|--------------|----------------|---------------------|
| FH-2 | Gluten Meal Cooling | FH-2: Baghouse | Gluten | 9.75 tons/hr. | 01-A-367-S2 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-367-S2
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.6 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 01-A-367-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-367-S2
567 IAC 23.4(7)

Operational Limits & Requirements

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

Process throughput:

1. This emission unit is limited to a production rate of 9.75 tons/hr.

Reporting & Record keeping:

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

1. The date, the production rate of this emission unit for the day (in tons/day), the hours of operation for this emission unit for the day (in hrs./day), and the average hourly production rate (in tons/hr.).

Authority for Requirement: Iowa DNR Construction Permit 01-A-367-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 141.75
- Stack Opening, (inches, dia.): 24
- Exhaust Flow Rate (scfm): 9,100 to 10,000
- Exhaust Temperature (°F): 70 to 125
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: Iowa DNR Construction Permit 01-A-367-S2

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

Monitoring Requirements

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 59-B7

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| FH-32 | Fiber Press | Fiber | 48,000 lb/hr. | NA |

Applicable Requirements

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

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 59C-F-1

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| FH-30 | Rail Car Loading | Corn Gluten Meal | 202.5 tons/hr. | NA |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7)

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 59-11

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| FH-25 | Corn Transfer | FH-25: Baghouse | Corn | 18 tons/hr. | 86-A-109 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 86-A-109
567 IAC 23.4(7)

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 74-E

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|------------------------------|----------------------------|
| FH-31 | Fiber Press | Fiber | 151,000 ft ³ /hr. | 82-A-071 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 82-A-071
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 138-04**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| FH-05N | Hammer Mill | FH-05: Baghouse | Dried Feed | 18.5 tons/hr. | 11-A-061-S1 |

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 11-A-061-S1
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.57 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 11-A-061-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.57 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 11-A-061-S1
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 63.1

Stack Opening, (inches): 31.5 x 31.5

Exhaust Flow Rate (acfm): 6,592

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 11-A-061-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 138-06**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| FH-08N | #4 Pellet Cooler | FH-08N: Baghouse | Dried Feed | 20 tons/hr. | 11-A-062-S2 |
| FH-09N | #3 Pellet Cooler | FH-09N: Baghouse | Dried Feed | 20 tons/hr. | |
| FH-43N | Dry Feed Pneumatic Conveyor | FH-43N: Baghouse | Dried Feed | 37 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(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 11-A-062-S2
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 1.17 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 11-A-062-S2

Pollutant: Particulate Matter

Emission Limit(s): 1.17 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 11-A-062-S2
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 100
Stack Opening, (inches, dia.): 34
Exhaust Flow Rate (scfm): 13,600
Exhaust Temperature (°F): 170
Discharge Style: Vertical Obstructed
Authority for Requirement: Iowa DNR Construction Permit 11-A-062-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No
(Required for FH-08N, FH-09N, & FH-43N)

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 138-10**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| FH-31N | Hammer Mill | 138-10: Baghouse | Dried Feed | 18.5 tons/hr. | 13-A-034 |

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 13-A-034
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.57 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 13-A-034

Pollutant: Particulate Matter

Emission Limit(s): 0.57 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 13-A-034
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 63.1

Stack Opening, (inches): 31.5 x 31.5

Exhaust Flow Rate (acfm): 6,592

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 13-A-034

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 138-11

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|---|--------------------------|---------------------|-----------------------|----------------------------|
| FH-32N | Pellet Cooler Bucket Elevator (LC51) | CE 138-11: Baghouse | Feed, Pellets | 40 tons/hr. | 13-A-035 |
| FH-33N | Bucket Elevator (MX53) | | Feed, Pellets | 40 tons/hr. | |
| FH-34N | Conveyor (MX54) | | Feed Pellets | 40 tons/hr. | |
| FH-35N | Bucket Elevator (MX55) | | Feed, Pellets | 40 tons/hr. | |
| FH-36N | Conveyor (MP52) | | Feed, Pellets | 40 tons/hr. | |
| FH-37N | Conveyor (MP53) | | Feed, Pellets | 40 tons/hr. | |
| FH-38N | Conveyor (MP54) | | Feed, Pellets | 40 tons/hr. | |
| FH-39N | Conveyor (MP55) | | Feed, Pellets | 40 tons/hr. | |
| FH-40N | Silo (MX100) | | Feed, Pellets | 40 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(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 13-A-035
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.70 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 13-A-035

Pollutant: Particulate Matter

Emission Limit(s): 0.70 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 13-A-035
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 92
Stack Opening, (inches, dia.): 35.6
Exhaust Flow Rate (acfm): 8,835
Exhaust Temperature (°F): 113
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 13-A-035

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 139-1

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---|--------------------------|------------------------------|----------------------------|
| FH-10N | Fiber Steam Tube Dryer, 2 Stages | CE-10: Cyclone CE-11: Cyclone CE-12: Scrubber CE-13: Regenerative Thermal Oxidizer | Wet Feed, Natural Gas | 37 tons/hr., 18 MMBtu/hr. | 11-A-066-S1 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 11-A-066-S1
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 6.0 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 11-A-066-S1

Pollutant: Particulate Matter

Emission Limit(s): 6.0 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 11-A-066-S1
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 7.0 lb./hr., 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 11-A-066-S1
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 4.5 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 11-A-066-S1

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 3.5 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 11-A-066-S1

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 5.0 lb./hr.
Authority for Requirement: Iowa DNR Construction Permit 11-A-066-S1

Pollutant: Total HAP
Emission Limit(s): 1.0 lb./hr.
Authority for Requirement: Iowa DNR Construction Permit 11-A-066-S1

Operational Limits & Requirements

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

Control equipment parameters:

1. The control equipment shall be operated, inspected and maintained according to manufacturer's recommendations.
2. The pH of the scrubber liquor shall be maintained between 6.5 and 9.5.
3. If any additive is used for a test demonstrating compliance with the emission limits, the minimum additive feed rate shall be that used during the compliance test.
4. The owner or operator shall maintain an average pressure drop across the wet scrubber (CE-12) that is between 1 and 5 inches water column based on a 3-hour averaging period. Roquette America, Inc. shall establish an alarm setting for the purpose of initiating corrective action based on a pressure drop across the wet scrubber of less than 1 inches water column or a pressure drop pressure drop across the wet scrubber of greater than 5 inches water column.
5. The owner or operator shall maintain the 3-hour average operating temperature of the Regenerative Thermal Oxidizer (CE-13) at no less than 50 degrees Fahrenheit below the average operating temperature the Regenerative Thermal Oxidizer (CE-13) recorded during the most recent performance test that demonstrated compliance with the emission limits as specified above.

Reporting & Record keeping:

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

1. The owner or operator shall keep records of control equipment inspections and maintenance.
2. If additive is used, record the additive feed rate to the scrubber on a continuous basis. If the additive feed rate deviates below the rate required (i.e., additive feed rate during a previous performance test that demonstrated compliance), then record the time, date and actions taken to correct the situation and also when the additive feed rate is greater than or equal to the required additive feed rate. This requirement shall not apply on the days that the scrubber is not in operation.
3. Record the pH on an hourly basis. On those days when there is an alarm for a pH less than 6.5 or greater than 9.5, calculate and record the pH based on a 3-hour average. This requirement shall not apply on the days that the scrubber is not in operation. If the pH deviates outside the range required, then record the time, date and actions taken to correct the situation and when the pH is back in the average pH range required
4. Record the scrubber pressure drop on a continuous basis. On those days when there is an alarm for the pressure drop reaching less than 1 inches water column or greater than 5 inches water

column, calculate and record the average pressure drop across the scrubber based on a 3-hour average. This requirement shall not apply on the days that the scrubber is not in operation. If the pressure drop deviates outside the range required, then record the time, date and actions taken to correct the situation and when the pressure drop is back in the average pressure drop range required.

5. Maintain a record of the average operating temperature of the Regenerative Thermal Oxidizer (CE-13) during the most recent performance test that demonstrated compliance with the emission limits as specified above.
6. The owner or operator shall keep three-hour block records of the operating temperature of the Regenerative Thermal Oxidizer (CE-13), and record all three-hour periods (during actual operations) during which the average temperature of the thermal oxidizer is more than 50 degrees Fahrenheit below the average temperature of the oxidizer during its most recent performance test which demonstrated compliance with the emission limits.

Authority for Requirement: Iowa DNR Construction Permit 11-A-066-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 100

Stack Opening, (inches, dia.): 56

Exhaust Flow Rate (scfm): 34,750

Exhaust Temperature (°F): 170-280

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 11-A-066-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

(Required for CE-10, CE-11. Required for Particulate Matter & PM₁₀.)

Authority for Requirement: 567 IAC 22.108(3)

Compliance Assurance Monitoring Plan
CAM Plan for EP 139-1; Control Devices CE 10, CE 11, CE 12, CE 13

I. Background

A. Emissions Units

Description: Fiber Stream Tube Dryer, 2 Stages
Identification: FH-10N
Facility: Roquette America, Inc.
1417 Exchange Street
Keokuk, IA 52632

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Iowa DNR Construction Permit 11-A-066
Particulate emission limit: PM: 6.0 lb/hr, 0.1 gr/dscf
PM₁₀: 6.0 lb/hr
Opacity limit: 40%
Sulfur Dioxide (SO₂): 7.0 lb/hr; 500ppmv
Volatile Organic Compounds: 3.5 lb/hr
Carbon Monoxide (CO): 5.0 lb/hr
Current Monitoring requirements: Record pressure drop across the scrubber and pH of scrubber liquor. If applicable, record scrubber additive feed rate (continuous or in batch). Record all control equipment inspections and maintenance.

C. Control Technology: Two cyclones (CE 10, CE 11), scrubber (CE 12), and regenerative thermal oxidizer (RTO) (CE 13)

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table 1. The selected performance indicators are percent particle level exiting the cyclone, pressure drop across the scrubber, pH of scrubber liquor, and temperature of the RTO.

Note: An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion is a deviation that must be reported in the Semi-Annual Monitoring Report and Annual Compliance Certification Report.

Table 1. Monitoring Approach

| General Criteria | Indicator 1 | Indicator 2 | Indicator 3 | Indicator 4 |
|----------------------|--|--|--|---|
| I. Indicator | Cyclone particle level percentage | Scrubber pressure drop | Scrubber liquor pH | Regenerative thermal oxidizer temperature |
| Measurement Approach | Particle level percentage will be measured at the exit of the cyclone. | Scrubber pressure drop will be measured across the control device by a differential pressure gauge. | Scrubber liquor pH will be measured by a strip chart recorder or other device. | Combustion chamber temperature is measured by a probe in or at the outlet of the combustion chamber. |
| II. Indicator Range | Particle level percentage will be recorded continuously to ensure that the level is maintained at less than 45% on a 24-hour average basis, except during startup, shutdown, or cleaning of control equipment. | Scrubber pressure drop will be recorded in accordance with Permit 11-A-066-S1 (or as amended) to ensure that the pressure drop is maintained between 1 and 5 inches water column, except during startup, shutdown, or cleaning of control equipment. | Scrubber liquor pH will be recorded in accordance with Permit 11-A-066-S1 (or as amended) to ensure pH is maintained between 6.5 and 9.5, except during startup, shutdown, or cleaning of control equipment. | Combustion chamber temperature will be recorded in accordance with Permit 11-A-066-S1 (or as amended) to ensure that chamber temperature remains above 1450 deg. F. |
| QIP Threshold | The QIP threshold is six excursions in a six month period. | The QIP threshold is six excursions in a six month period. | The QIP threshold is six excursions in a six month period. | The QIP threshold is six excursions in a six month period. |

| III. Performance Criteria | Indicator 1 | Indicator 2 | Indicator 3 | Indicator 4 |
|---------------------------------------|--|---|--|---|
| A. Data Representativeness | The cyclone is designed to operate with a particle level percentage less than 45% on a 24-hour average basis. If the level exceeds this value, it is an indication of the potential for increased particulate emissions. | The scrubber is designed to have maximum control efficiency operating with a pressure drop between 1 and 5 inches of water. If the pressure drop drifts outside the optimal efficiency range, this is an indication of the potential for increased SO ₂ and particulate emissions. | The scrubber is designed to operate at maximum control efficiency with a liquor pH of between 6.5 and 9.5. If the liquor pH drifts outside the optimal efficiency range, this is an indication of the potential for increased SO ₂ and particulate emissions. | The thermal oxidizer is designed to operate at maximum control efficiency with a combustion chamber temperature above 1450 deg F. If the temperature drifts below the optimal temperature, this is an indication of the potential for increased CO emissions. |
| B. Verification of Operational Status | Records of particle level percentage readings will be maintained for five years. | Records of pressure drop readings will be maintained for five years. | Records of liquor pH readings will be maintained for five years. | Readings of combustion chamber temperature will be maintained for five years. |

| | Indicator 1 | Indicator 2 | Indicator 3 | Indicator 4 |
|---------------------------------|---|---|---|--|
| C. QA/QC Practices and Criteria | Monitoring devices will be maintained using procedures that take into account manufacturer's specifications. Cyclone will be maintained as outlined in the facility's operation and maintenance plan. | Pressure gauges will be maintained using procedures that take into account manufacturer's specifications. Scrubber will be maintained as outlined in the facility's operation and maintenance plan. | Recording devices will be maintained using procedures that take into account manufacturer's specifications. Scrubber will be maintained as outlined in the facility's operation and maintenance plan. | Temperature probes will be maintained using procedures that take into account manufacturer's specifications. Thermal oxidizer will be maintained as outlined in the facility's operation and maintenance plan. |
| D. Monitoring Frequency | <p>The particle level readings shall be monitored on a 24-hr average basis while the emission unit is in operation.</p> <p>If the level goes above the indicator level specified above, corrective action shall be taken as soon as possible, but no later than eight hours from observation.</p> | <p>The pressure drop readings shall be monitored in accordance with Permit 11-A-066-S1 (or as amended) while the emission unit is in operation.</p> <p>If pressure drop falls out of the indicator range specified above, corrective action shall be taken as soon as possible, but no later than eight hours from observation.</p> | <p>The liquor pH readings shall be monitored in accordance with Permit 11-A-066-S1 (or as amended) while the emission unit is in operation.</p> <p>If liquor pH falls out of the indicator range specified above, corrective action shall be taken as soon as possible, but no later than eight hours from observation.</p> | <p>The combustion chamber readings shall be monitored in accordance with Permit 11-A-066-S1 (or as amended) while the emission unit is in operation.</p> <p>If combustion chamber temperature falls below the indicator range specified above, corrective action shall be taken as soon as possible, but no later than eight hours from observation.</p> |

| | | | | |
|--------------------------------------|--|---|--|--|
| <p>E. Data Collection Procedures</p> | <p>Electronic or hard copy of particle level readings will be available upon request.</p> <p>Corrective actions resulting from excursions will be recorded.</p> | <p>Electronic or hard copy of pressure drop readings will be available upon request.</p> <p>Corrective actions resulting from excursions will be recorded.</p> | <p>Electronic or hard copy of pH readings will be available upon request.</p> <p>Corrective actions resulting from excursions will be recorded.</p> | <p>Electronic or hard copy of combustion chamber temperature readings will be available upon request.</p> <p>Corrective actions resulting from excursions will be recorded.</p> |
| <p>IV. Justification</p> | <p>Particle level percentage was selected as one of the performance indicators because it demonstrates the proper operating conditions of this control device and therefore the optimal particulate control performance.</p> | <p>Pressure drop was selected as one of the performance indicators because it demonstrates the proper operating conditions of this control device and therefore the optimal SO₂ and particulate control performance.</p> | <p>Scrubber liquor pH was selected as one of the performance indicators because it demonstrates the proper operating conditions of this control device and therefore the optimal SO₂ control performance.</p> | <p>Combustion chamber temperature was selected as one of the performance indicators because it demonstrates the proper operating conditions of this control device and therefore the optimal CO control performance.</p> |

Emission Point ID Number: 139-2

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|---------------|---|---|--------------|----------------|---------------------|
| FH-10N | Fiber Steam Tube Dryer, 2 Stages Bypass | CE-10: Cyclone CE-11: Cyclone CE-12: Scrubber | Wet Feed | 37 tons/hr. | 11-A-067-S2 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 11-A-067-S2
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 6.0 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 11-A-067-S2

Pollutant: Particulate Matter

Emission Limit(s): 6.0 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 11-A-067-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 7.0 lb./hr., 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 11-A-067-S2
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 4.5 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 11-A-067-S2

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 175.0 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 11-A-067-S2

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 50.0 lb./hr.
Authority for Requirement: Iowa DNR Construction Permit 11-A-067-S2

Pollutant: Total HAP
Emission Limit(s): 28.0 lb./hr.
Authority for Requirement: Iowa DNR Construction Permit 11-A-067-S2

Operational Limits & Requirements

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

Hours of operation:

1. The bypass, EP 139-2, shall be used a maximum of 100 hours per twelve month rolling period.
2. The bypass, EP 139-2, shall be used a maximum of 3 hours in any calendar day.

Control equipment parameters:

1. The control equipment shall be operated, inspected and maintained according to manufacturer's recommendations.
2. The pH of the scrubber liquor shall be maintained between 6.5 and 9.5.
3. If any additive is used for a test demonstrating compliance with the emission limits, the minimum additive feed rate shall be that used during the compliance test.
4. The owner or operator shall maintain an average pressure drop across the wet scrubber (CE-12) that is between 1 and 5 inches water column based on a 3-hour averaging period. Roquette America, Inc. shall establish an alarm setting for the purpose of initiating corrective action based on a pressure drop across the wet scrubber of less than 1 inches water column or a pressure drop pressure drop across the wet scrubber of greater than 5 inches water column.

Work practice standards:

Reporting & Record keeping:

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

1. The owner or operator shall keep records of control equipment inspections and maintenance.
2. If additive is used, record the additive feed rate to the scrubber on a continuous basis. If the additive feed rate deviates below the rate required (i.e., additive feed rate during a previous performance test that demonstrated compliance), then record the time, date and actions taken to correct the situation and also when the additive feed rate is greater than or equal to the required additive feed rate. This requirement shall not apply on the days that the scrubber is not in operation.
3. Record the pH on an hourly basis. On those days when there is an alarm for a pH less than 6.5 or greater than 9.5, calculate and record the pH based on a 3-hour average. This requirement shall not apply on the days that the scrubber is not in operation. If the pH deviates outside the range required, then record the time, date and actions taken to correct the situation and when the pH is back in the average pH range required
4. Record the scrubber pressure drop on a continuous basis. On those days when there is an alarm for the pressure drop reaching less than 1 inches water column or greater than 5 inches water

column, calculate and record the average pressure drop across the scrubber based on a 3-hour average. This requirement shall not apply on the days that the scrubber is not in operation. If the pressure drop deviates outside the range required, then record the time, date and actions taken to correct the situation and when the pressure drop is back in the average pressure drop range required.

5. The owner or operator shall keep monthly records of the number of hours the bypass, EP 139-2, is used, and update the twelve month rolling total on a monthly basis.
6. The owner or operator shall keep daily records of the number of hours that the bypass, EP 139-2, is used in a calendar day. A record is not required for the days when the bypass was not used.

Authority for Requirement: Iowa DNR Construction Permit 11-A-067-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 47.9

Stack Opening, (inches, dia.): 56

Exhaust Flow Rate (acfm): 44,602 to 71,616

Exhaust Temperature (°F): 145

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 11-A-067-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 140-1**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| FH-41N | Gluten Truck Loadout | CE 140-1: Baghouse | Gluten, Pellets | 187.5 tons/hr. | 11-A-068-S1 |
| FH-42N | Pellet Truck Loadout | | Gluten, Pellets | 165 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(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 11-A-068-S1
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 1.03 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 11-A-068-S1

Pollutant: Particulate Matter

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

Authority for Requirement: Iowa DNR Construction Permit 11-A-068-S1
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 55
- Stack Opening, (inches): 25 x 19
- Exhaust Flow Rate (acfm): 12,000
- Exhaust Temperature (°F): Ambient
- Discharge Style: Horizontal
- Authority for Requirement: Iowa DNR Construction Permit 11-A-068-S1

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

Monitoring Requirements

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 140-2 & 140-3

Associated Equipment

| Emission Point | Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|-----------------------|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| 140-2 | FH-13N | #1 Pellet Loadout Bin | CE-15: Baghouse | Pellets | 40 tons/hr. | 11-A-069-S1 |
| 140-3 | FN-14N | #2 Pellet Loadout Bin | CE-16: Baghouse | Pellets | 40 tons/hr. | 11-A-070-S1 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permits 11-A-069-S1 & 11-A-070-S1
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.043 lb./hr.

Authority for Requirement: Iowa DNR Construction Permits 11-A-069-S1 & 11-A-070-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.043 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permits 11-A-069-S1 & 11-A-070-S1
567 IAC 23.4(7)

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 66.7
- Stack Opening, (inches, dia.): 12
- Exhaust Flow Rate (acfm): 500
- Exhaust Temperature (°F): Ambient
- Discharge Style: Vertical Obstructed
- Authority for Requirement: Iowa DNR Construction Permits 11-A-069-S1 & 11-A-070-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No
(Required for CE-15 & CE-16)

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 140-4

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| FH-15N | Gluten Loadout Bin | CE-17: Baghouse | Gluten | 12 tons/hr. | 11-A-071-S2 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 11-A-071-S2
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.086 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 11-A-071-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.086 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 11-A-071-S2
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 64
- Stack Opening, (inches, dia.): 6
- Exhaust Flow Rate (scfm): 1,000
- Exhaust Temperature (°F): Ambient
- Discharge Style: Downward
- Authority for Requirement: Iowa DNR Construction Permit 11-A-071-S2

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

Monitoring Requirements

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Generators Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|----------------------------------|--|
| 110-2 | RF-12 | Emergency Generator | 15-A-502 |
| EG-1 | EG-1 | Emergency Generator | NA |
| GH-1 | GH-1 | Emergency Generator | NA |
| GH-2 | GH-2 | Emergency Generator | 15-A-512 |
| 82A-1 | RE-4 | Emergency Generator | NA |
| 66-T | RC-09 | Emergency Generator | NA |
| 66-U | RC-17 | Diesel Engine | NA |

Emission Point ID Number: 110-2

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| RF-12 | Emergency Generator | Diesel Fuel | 536 hp | 15-A-502 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 15-A-502
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of 20% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

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

Operational Limits & Requirements

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

Process throughput:

1. This engine is limited to operating a maximum of 500 hours in any rolling 12-month period.
2. The sulfur content of the fuel oil consumed in this unit shall not exceed 0.5% by weight.
3. This engine is limited to operate as an emergency stationary internal combustion engine as defined in 40 CFR 63.6675 and in accordance with 40 CFR 63.6640(f). There is no time limit on the use of the engine in emergency situations provided that the annual hourly limit established in Condition 1 above is not exceeded. In accordance with 40 CFR 63.6640(f), the engine is limited to operate a maximum of 100 hours per year for maintenance checks and readiness testing.
4. The engine is also allowed to operate up to 50 hours per year in non-emergency situations, but the 50 hours are counted toward the 100 hours provided for maintenance and testing. The 50 hours per year for non-emergency operation cannot be used to generate income for the facility to supply power to the electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. This engine is not allowed to operate as a peak shaving unit.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. For each instance the engine operates, record the following information:
 - a. Date that operation commenced;
 - b. The number of hours the unit operated;
 - c. The reason the engine was operated.
2. At the end of each month, record the number of hours the unit operated over the previous month.
3. At the end of each month, record the number of hours the unit operated over the previous twelve (12) months.
4. For each shipment of fuel oil received maintain a fuel certification or other vendor's documentation showing the sulfur content of the fuel oil received.

Authority for Requirement: Iowa DNR Construction Permit 15-A-502
40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 10
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): 380
Exhaust Temperature (°F): 1063
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 15-A-502

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EG-1

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|---------------|---------------------------|--------------|----------------|---------------------|
| EG-1 | Emergency Generator | Natural Gas | 231 hp | NA |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

NESHAP:

The emergency engine is subject to 40 CFR Part 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(ii) this spark ignition emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after June 12, 2006.

According to 40 CFR 63.6590(c)(6), this emergency engine must meet the requirements of subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart JJJJ for spark ignition engines. No further requirements apply for this engine under subpart ZZZZ.

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

Emission Standards:

(40 CFR 60.4233(e) and Table 1 to Subpart JJJJ)

| Maximum Engine Power | Manufacture Date | Emission Standards ⁽¹⁾ | | | | | | |
|----------------------|------------------|-----------------------------------|----------------------|-------------------|--------------------|-----------------------------|-----|-----|
| | | g/HP-hr | | | | ppmvd at 15% O ₂ | | |
| | | NO _x | HC + NO _x | CO ⁽²⁾ | VOC ⁽³⁾ | NO _x | CO | VOC |
| HP ≥ 130 | 1/1/2009+ | 2.0 | N/A | 4.0 | 1.0 | 160 | 540 | 86 |

- ⁽¹⁾ Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O₂.
- ⁽²⁾ See rule for alternative CO certification standards for engines ≥ 100 hp and manufactured prior to 1/1/2011.
- ⁽³⁾ Formaldehyde emissions are not included.

Compliance Demonstrations:

1. You must demonstrate compliance with the emission standards according to one of following methods (40 CFR 60.4243(b)):
 - a) Purchasing a certified engine that complies with the emission standards, or
2. Owners and operators of SI engines that are required to be certified and who operate and maintain the engine according to the manufacturer’s written instructions must keep records of required maintenance. 40 CFR 60.4243(b)(1), 4243(a) and 4245(a)(2).
3. Owners and operators of natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, a performance test must be conducted to demonstrate compliance with the emission standards. 40 CFR 60.4243(e).
4. Owners and operators of certified engines must keep a record from the manufacturer that the engines are certified to meet applicable emission standards. 40 CFR 60.4245(a)(3).
5. Owners and operators of non-certified engines or certified engines operating in a non-certified manner must keep documentation that these engines meet the applicable emission standards. 40 CFR 60.4245(a)(4).

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

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

| Maximum Engine Power | Engine Was Built On Or After |
|----------------------|------------------------------|
| 130 ≤ HP < 500 | 1/1/2011 |

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: GH-1

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| GH-1 | Emergency Generator | Natural Gas | 50 hp | NA |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

NESHAP:

The emergency engine is subject to 40 CFR Part 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(ii) this spark ignition emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after June 12, 2006.

According to 40 CFR 63.6590(c)(6), this emergency engine must meet the requirements of subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart JJJJ for spark ignition engines. No further requirements apply for this engine under subpart ZZZZ.

Based on the manufacture date of this engine, 40 CFR 60 Subpart JJJJ does not apply to this engine.

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: GH-2

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|---------------|---------------------------|--------------|----------------|---------------------|
| GH-2 | Emergency Generator | Natural Gas | 97.7 hp | 15-A-607 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 15-A-607
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 15-A-607
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 15-A-607
567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

Process throughput:

1. This generator is limited to burning natural gas.
2. This generator shall not operate more than 500 hours per rolling twelve-month period.
3. The facility shall install a non-resettable hour meter if one is not already installed, as per 40 CFR Part 63 Subpart ZZZZ.
4. The facility shall 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.
5. The facility may operate the emergency engine up to 50 hours per calendar year for non-emergency situations; however, those 50 hours are counted toward the 100 hours of maintenance and testing and emergency demand response.

6. The facility shall change the oil and filter every 500 hours of operation or annually, whichever comes first.
7. The facility shall inspect the air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary.
8. The facility shall inspect all hoses and belt every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. The owner or operator shall maintain the following monthly records:
 - i. the number of hours that the engine operated for maintenance checks and readiness testing;
 - ii. the number of hours that the engine operated for allowed non-emergency operations;
 - iii. the total number of hours that the engine operated; and
 - iv. the rolling 12-month total amount of the number of hours that the engine operated.
2. The owner or operator shall maintain the following annual records:
 - i. the number of hours that the engine operated for maintenance checks and readiness testing; and ,
 - ii. the number of hours that the engine operated for allowed non-emergency operations.
3. Maintain records of the maintenance conducted on this emergency engine.

Authority for Requirement: Iowa DNR Construction Permit 15-A-607
 40 CFR Part 63 Subpart ZZZZ
 567 IAC 23.1(4)"cz"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 10

Stack Opening, (inches, dia.): 3

Exhaust Flow Rate (scfm): 470

Exhaust Temperature (°F): 1,211

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 15-A-607

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 82A-1

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|---------------|---------------------------|--------------|----------------|---------------------|
| RE-4 | Emergency Generator | Diesel Fuel | 114 hp | NA |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operational Limits & Requirements

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

Process throughput:

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

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

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

Authority for Requirement: 567 IAC 22.108(3)

NESHAP:

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.

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, and emergency demand response. 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 non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 66-T**Associated Equipment**

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| RC-17 | Emergency Generator | Diesel Fuel | 310 hp | NA |

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operational Limits & Requirements

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

Process throughput:

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

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

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

Authority for Requirement: 567 IAC 22.108(3)

NESHAP:

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.

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, and emergency demand response. 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 non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

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

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 66-U**Associated Equipment**

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| RC-17 | Emergency Generator | Diesel Fuel | 80 hp | NA |

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operational Limits & Requirements

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

Process throughput:

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

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

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

Authority for Requirement: 567 IAC 22.108(3)

NESHAP:

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.

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, and emergency demand response. 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 non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

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

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Germ Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|----------------------------------|--|
| 12-6 | G-4 | #4 Germ Dryer | 09-A-044 |
| | G-5 | #5 Germ Dryer | |
| | G-6 | #6 Germ Dryer | |
| 12-8 | G-2 | #2 Germ Dryer | 77-A-334-S1 |
| | G-3 | #3 Germ Dryer | |
| 12-13 | G-12 | Germ Transfer | 01-A-059 |
| 12-14 | G-1 | #1 Germ Dryer | 09-A-045 |
| | G-7 | #7 Germ Dryer | |
| | G-8 | Germ Cooler | |

Emission Point ID Number: 12-6**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| G-4 | #4 Germ Dryer | 12-6: Rotoclone | Corn Germ | 10 tons/hr. | 09-A-044 |
| G-5 | #5 Germ Dryer | | Corn Germ | 10 tons/hr. | |
| G-6 | #6 Germ Dryer | | Corn Germ | 10 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(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 09-A-044
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.81 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 09-A-044

Pollutant: Particulate Matter

Emission Limit(s): 0.81 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 09-A-044
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 24.3 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 09-A-044

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 62
Stack Opening, (inches, dia.): 20
Exhaust Flow Rate (acfm): 9,800
Exhaust Temperature (°F): 185
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 09-A-044

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 12-8**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| G-2 | #2 Germ Dryer | 12-8: Rotoclone | Corn Germ | 10 tons/hr. | 77-A-334-S1 |
| G-3 | #3 Germ Dryer | | Corn Germ | 10 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(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 77-A-334-S1
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.42 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 77-A-334-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.62 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 77-A-334-S1
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 3.16 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 77-A-334-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 62
Stack Opening, (inches, dia.): 20
Exhaust Flow Rate (acfm): 9,800
Exhaust Temperature (°F): 175
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 77-A-334-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 12-13**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| G-12 | Germ Transfer | 12-13: Baghouse | Corn Germ | 12.5 tons/hr. | 01-A-059 |

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-059
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.07 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 01-A-059

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-059
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 53
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 900
Exhaust Temperature (°F): 100
Discharge Style: Vertical Obstructed
Authority for Requirement: Iowa DNR Construction Permit 01-A-059

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 12-14**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| G-1 | #1 Germ Dryer | 12-14: Rotoclone | Corn Germ | 10 tons/hr. | 09-A-045 |
| G-7 | #7 Germ Dryer | | Corn Germ | 10 tons/hr. | |
| G-8 | Germ Cooler | | Corn Germ | 10 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(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 09-A-045
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.42 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 09-A-045

Pollutant: Particulate Matter

Emission Limit(s): 0.62 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 09-A-045
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 3.16 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 09-A-045

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 62
Stack Opening, (inches, dia.): 20
Exhaust Flow Rate (acfm): 9,800
Exhaust Temperature (°F): 185
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 09-A-045

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Mill Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|----------------------------------|--|
| 7/8/9/10 | M-1 | Mill House Exhaust Vents | NA |
| 7-3 | M-2 | 17 Steep Tanks | 10-A-216-S1 |
| 7-16 | M-5A | 5 th Fiber Wash Tank | 09-A-463-S2 |
| | M-5B | 2 nd Grind Pit | |
| | M-5C | 3 rd Grind Pits | |
| 8-5 | M-6 | Fiber Wash Tanks & Filtrate Tank | 09-A-468-S2 |
| 8-8 | M-4 | Wet Corn Hopper Room | 09-A-462-S2 |
| 83-1 | M-66 | Steeping | 04-A-663-S2 |
| | M-67 | Steeping | |
| | M-68 | Steeping | |
| | M-69 | Steeping | |
| | M-74 | Steeping | |
| | M-75 | Steeping | |
| | M-76 | Steeping | |
| M-77 | Steeping | | |

Emission Point ID Number: 7/8/9/10

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| M-1 | Mill House Exhaust Vents | Corn | 220 tons/hr. | NA |

Applicable Requirements

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

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 7-3

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|---------------|---------------------------|--------------|-----------------------|---------------------|
| M-2 | 17 Steep Tanks | Corn | 65,000 gallons (each) | 10-A-216-S1 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 10-A-216-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 10-A-216-S1
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 15.2 lb./hr., 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 10-A-216-S1
567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

Process throughput:

1. The throughput of this equipment shall not exceed 190 tons per hour.

Reporting & Record keeping:

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

1. At the end of each day, record the amount, in tons, of material processed by this equipment on that day.
2. At the end of each day, record the number of hours this equipment operated on that day.

3. For each day, calculate the daily average hourly production rate by dividing the amount of material processed on that day by the number of hours this equipment operated on that day. This calculation shall be performed no later than 7 days after the end of the month.

Authority for Requirement: Iowa DNR Construction Permit 10-A-216-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 50

Stack Opening, (inches, dia.): 48

Exhaust Flow Rate (scfm): 14,350

Exhaust Temperature (°F): 98

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 10-A-216-S1

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

Monitoring Requirements

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

Stack Testing:

Pollutant – Sulfur Dioxide (SO₂)

Stack Test to be Completed by – 9/26/2018

Test Method – 40 CFR 60, Appendix A, Method 6C

Authority for Requirement – 567 IAC 22.108(3)"b"

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 7-16

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|---------------|---------------------------------|---------------------------------------|--------------------|---------------------|
| M-5A | 5 th Fiber Wash Tank | Starch, Gluten, Fibrous Corn Material | 1,000 gallons | 09-A-463-S2 |
| M-5B | 2 nd Grind Pit | | 220 tons/hr. | |
| M-5C | 3 rd Grind Pits (4) | | 55 tons/hr. (each) | |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 09-A-463-S2
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 09-A-463-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 4.86 lb./hr., 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 09-A-463-S2
567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 9.0 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 09-A-463-S2

Operational Limits & Requirements

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

Process throughput:

1. The throughput of this equipment shall not exceed 190 tons per hour.

Reporting & Record keeping:

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

1. At the end of each day, record the amount, in tons, of material processed by this equipment of the previous day.
2. At the end of each day, record the number of hours this equipment operated over the previous day.
3. For each day, calculate the daily average hourly production rate by dividing the amount of material processed on that day by the number of hours this equipment operated on that day. This calculation shall be performed no later than 7 days after the end of the month.

Authority for Requirement: Iowa DNR Construction Permit 09-A-463-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 63

Stack Opening, (inches, dia.): 14

Exhaust Flow Rate (scfm): 2,500

Exhaust Temperature (°F): 100

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 09-A-463-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 8-5

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|---------------|----------------------------------|---------------------------------------|-------------------|---------------------|
| M-6 | Fiber Wash Tanks & Filtrate Tank | Starch, Gluten, Fibrous Corn Material | 6,786 bushels/hr. | 09-A-468-S2 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 09-A-468-S2
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 09-A-468-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 3.99 lb./hr., 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 09-A-468-S2
567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 2.0 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 09-A-468-S2

Operational Limits & Requirements

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

Process throughput:

1. The throughput of this equipment shall not exceed 190 tons per hour.

Reporting & Record keeping:

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

1. At the end of each day, record the amount, in tons, of material processed by this equipment of the previous day.
2. At the end of each day, record the number of hours this equipment operated over the previous day.
3. For each day, calculate the daily average hourly production rate by dividing the amount of material processed on that day by the number of hours this equipment operated on that day. This calculation shall be performed no later than 7 days after the end of the month.

Authority for Requirement: Iowa DNR Construction Permit 09-A-468-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 61

Stack Opening, (inches, dia.): 21

Exhaust Flow Rate (scfm): 800 – 1,500

Exhaust Temperature (°F): 115

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 09-A-468-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 8-8

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|---------------|---------------------------|--------------|----------------|---------------------|
| M-4 | Wet Corn Hopper Room | Corn | 190 tons/hr. | 09-A-462-S2 |

Applicable Requirements

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

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.0 lb./hr., 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 09-A-462-S2
567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 1.0 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 09-A-462-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 63.8

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (scfm): 4,800

Exhaust Temperature (°F): 70

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 09-A-462-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 83-1**Associated Equipment**

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| M-66 | Steeping | Corn | 13,500 bushels/hr. | 04-A-663-S2 |
| M-67 | Steeping | Corn | 13,500 bushels/hr. | |
| M-68 | Steeping | Corn | 13,500 bushels/hr. | |
| M-69 | Steeping | Corn | 13,500 bushels/hr. | |
| M-74 | Steeping | Corn | 13,500 bushels/hr. | |
| M-75 | Steeping | Corn | 13,500 bushels/hr. | |
| M-76 | Steeping | Corn | 13,500 bushels/hr. | |
| M-77 | Steeping | Corn | 13,500 bushels/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: Sulfur Dioxide (SO₂)

Emission Limit(s): 9.0 lb./hr., 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 04-A-663-S2
567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 9.0 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 04-A-663-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 106.6
- Stack Opening, (inches, dia.): 24.5
- Exhaust Flow Rate (scfm): 2,800
- Exhaust Temperature (°F): 110
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: Iowa DNR Construction Permit 04-A-663-S2

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

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

RASI Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|----------------------------------|--|
| 200 | 200 | Clamshell #1 To Hopper #1 | 10-A-286-S1 |
| 201 | 201 | Hopper #1 To Conveyor #1 | 10-A-287-S1 |
| 202 | 202 | Conveyor #1 To Conveyor #2 | 10-A-288-S1 |
| 203 | 203 | Conveyor #2 To Conveyor #3 | 10-A-289-S1 |
| 204 | 204 | Conveyor #3 To Conveyor #4 | 10-A-290-S1 |
| 205 | 205 | Conveyor #4 To Stacker | 10-A-291-S1 |
| 206 | 206 | Stacker To Coal Pile | 10-A-292-S1 |
| 207 | 207 | Coal/Coke Pile Receiving | 10-A-297-S1 |
| 208 | 208 | Coal/Coke Loader To Trucks | 10-A-295-S1 |
| 209 | 209 | Salt Loader To Trucks | 10-A-296-S1 |
| 210 | 210 | East Haul Road Traffic | 10-A-298-S1 |
| 211 | 211 | West Haul Road Traffic | 10-A-299-S1 |
| 213 | 213 | Coal/Coke Pile | 10-A-293 |
| 214 | 214 | Salt Pile | 10-A-294 |
| 215 | 215 | Coal/Coke Pile | 11-A-452 |

Emission Point ID Number: 200**Associated Equipment**

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| 200 | Clamshell #1 to Hopper #1 | Coal, Coke, Salt | 500 tons/hr. | 10-A-286-S1 |

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

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

Pollutant: Fugitive Dust

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

Authority for Requirement: Iowa DNR Construction Permit 10-A-286-S1
567 IAC 23.3(2)"c"

Operational Limits & Requirements

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

Hours of operation:

1. The operation of this unit shall be limited to the time period between 6:00 AM and 10:00 PM each operating day.

Process throughput:

1. The amount of material received from or loaded into barges at this facility shall not exceed a maximum of 5600 tons of material each operating day.
2. Clamshell #2 shall remain uncertified for use. If at any time the facility wishes to use clamshell #2, a construction permit shall be obtained for that equipment prior to its use.
3. Clamshell #1 is authorized to be operated at both the east and far west barge unloading locations.

Reporting & Record keeping:

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

1. For each operating day, record the time the equipment at the Roquette America Railroad facility started operating and ends operating that particular day. If none of the equipment is used during a calendar day, the operating log shall note that the facility did not operate that day.
2. At the end of each working day, record the type and amount (in tons) of each material received at this facility by barge.
3. For each working day, calculate the total amount (in tons) of material received at this facility. This calculation shall be completed no later than 7 days after the end of the month.

Authority for Requirement: Iowa DNR Construction Permit 10-A-286-S1

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 201

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| 201 | Hopper #1 To Conveyor #1 | Coal, Coke, Salt | 800 tons/hr. | 10-A-287-S1 |

Applicable Requirements

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

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

Pollutant: Fugitive Dust

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

Authority for Requirement: Iowa DNR Construction Permit 10-A-287-S1
567 IAC 23.3(2)"c"

Operational Limits & Requirements

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

Hours of operation:

1. The operation of this unit shall be limited to the time period between 6:00 AM and 10:00 PM each operating day.

Process throughput:

1. This unit shall only handle material received by the facility from barges.
2. Receiving Hopper #1 is authorized to be operated at both the east and far west barge unloading locations.

Reporting & Record keeping:

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

1. For each operating day, record the time the equipment at the Roquette America Railroad facility started operating and ends operating that particular day. If none of the equipment is used during a calendar day, the operating log shall note that the facility did not operate that day.

Authority for Requirement: Iowa DNR Construction Permit 10-A-287-S1

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 202**Associated Equipment**

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| 202 | Conveyor #1 To Conveyor #2 | Coal, Coke, Salt | 800 tons/hr. | 10-A-288-S1 |

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

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

Pollutant: Fugitive Dust

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

Authority for Requirement: Iowa DNR Construction Permit 10-A-288-S1
567 IAC 23.3(2)"c"

Operational Limits & Requirements

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

Hours of operation:

1. The operation of this unit shall be limited to the time period between 6:00 AM and 10:00 PM each operating day.

Process throughput:

1. This unit shall only handle material received by the facility from barges.
2. One of either the Radial Stacker EP 206 or Conveyor #1 EP 202 is authorized to be operated at the far west barge unloading location, whereas both can be operated at the east barge area.

Reporting & Record keeping:

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

1. For each operating day, record the time the equipment at the Roquette America Railroad facility started operating and ends operating that particular day. If none of the equipment is used during a calendar day, the operating log shall note that the facility did not operate that day.

Authority for Requirement: Iowa DNR Construction Permit 10-A-288-S1

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 203

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| 203 | Conveyor #2 To Conveyor #3 | Coal, Coke, Salt | 800 tons/hr. | 10-A-289-S1 |

Applicable Requirements

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

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

Pollutant: Fugitive Dust

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

Authority for Requirement: Iowa DNR Construction Permit 10-A-289-S1
567 IAC 23.3(2)"c"

Operational Limits & Requirements

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

Hours of operation:

1. The operation of this unit shall be limited to the time period between 6:00 AM and 10:00 PM each operating day.

Process throughput:

1. This unit shall only handle material received by the facility from barges.

Reporting & Record keeping:

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

1. For each operating day, record the time the equipment at the Roquette America Railroad facility started operating and ends operating that particular day. If none of the equipment is used during a calendar day, the operating log shall note that the facility did not operate that day.

Authority for Requirement: Iowa DNR Construction Permit 10-A-289-S2

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 204**Associated Equipment**

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| 204 | Conveyor #3 To Conveyor #4 | Coal, Coke, Salt | 800 tons/hr. | 10-A-290-S1 |

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

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

Pollutant: Fugitive Dust

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

Authority for Requirement: Iowa DNR Construction Permit 10-A-290-S1
567 IAC 23.3(2)"c"

Operational Limits & Requirements

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

Hours of operation:

1. The operation of this unit shall be limited to the time period between 6:00 AM and 10:00 PM each operating day.

Process throughput:

1. This unit shall only handle material received by the facility from barges.

Reporting & Record keeping:

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

1. For each operating day, record the time the equipment at the Roquette America Railroad facility started operating and ends operating that particular day. If none of the equipment is used during a calendar day, the operating log shall note that the facility did not operate that day.

Authority for Requirement: Iowa DNR Construction Permit 10-A-290-S1

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 205**Associated Equipment**

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| 205 | Conveyor #4 To Stacker | Coal, Coke, Salt | 800 tons/hr. | 10-A-291-S1 |

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

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

Pollutant: Fugitive Dust

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

Authority for Requirement: Iowa DNR Construction Permit 10-A-291-S1
567 IAC 23.3(2)"c"

Operational Limits & Requirements

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

Hours of operation:

1. The operation of this unit shall be limited to the time period between 6:00 AM and 10:00 PM each operating day.

Process throughput:

1. This unit shall only handle material received by the facility from barges.

Reporting & Record keeping:

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

1. For each operating day, record the time the equipment at the Roquette America Railroad facility started operating and ends operating that particular day. If none of the equipment is used during a calendar day, the operating log shall note that the facility did not operate that day.

Authority for Requirement: Iowa DNR Construction Permit 10-A-291-S1

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 206

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|---------------|---------------------------|------------------|----------------|---------------------|
| 206 | Stacker to Coal Pile | Coal, Coke, Salt | 800 tons/hr. | 10-A-292-S1 |

Applicable Requirements

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

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

Pollutant: Fugitive Dust

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

Authority for Requirement: Iowa DNR Construction Permit 10-A-292-S1
567 IAC 23.3(2)"c"

Operational Limits & Requirements

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

Hours of operation:

1. The operation of this unit shall be limited to the time period between 6:00 AM and 10:00 PM each operating day.

Process throughput:

1. This unit shall only handle material received by the facility from barges.
2. One of either the Radial Stacker EP 206 or Conveyor #1 EP 202 is authorized to be operated at the far west barge unloading location, whereas both can be operated at the east barge area.

Reporting & Record keeping:

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

1. For each operating day, record the time the equipment at the Roquette America Railroad facility started operating and ends operating that particular day. If none of the equipment is used during a calendar day, the operating log shall note that the facility did not operate that day.

Authority for Requirement: Iowa DNR Construction Permit 10-A-292-S1

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 207**Associated Equipment**

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| 207 | Coal/Coke Pile Receiving | Coal, Coke | 150 tons/hr. | 10-A-297-S1 |

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

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

Pollutant: Fugitive Dust

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

Authority for Requirement: Iowa DNR Construction Permit 10-A-297-S1
567 IAC 23.3(2)"c"

Operational Limits & Requirements

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

Hours of operation:

1. The operation of this unit shall be limited to the time period between 6:00 AM and 10:00 PM each operating day.

Process throughput:

1. No more than 1600 tons of material shall be unloaded from trucks in this operation each working day.

Reporting & Record keeping:

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

1. For each operating day, record the time the equipment at the Roquette America Railroad facility started operating and ends operating that particular day. If none of the equipment is used during a calendar day, the operating log shall note that the facility did not operate that day.
2. At the end of each day, record the amount (in tons) of material unloaded from trucks in this operation during that working day.

Authority for Requirement: Iowa DNR Construction Permit 10-A-297-S1

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 208**Associated Equipment**

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| 208 | Coal/Coke Loader to Trucks | Cola, Coke | 150 tons/hr. | 10-A-295-S1 |

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

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

Pollutant: Fugitive Dust

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

Authority for Requirement: Iowa DNR Construction Permit 10-A-295-S1
567 IAC 23.3(2)"c"

Operational Limits & Requirements

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

Hours of operation:

1. The operation of this unit shall be limited to the time period between 6:00 AM and 10:00 PM each operating day.

Process throughput:

1. No more than 1600 tons of material shall be loaded into trucks in this operation each working day.
2. One of either Loader EP 208 or EP 209 is authorized to be operated at the far west barge unloading location, whereas both can be operated at the east barge area.

Reporting & Record keeping:

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

1. For each operating day, record the time the equipment at the Roquette America Railroad facility started operating and ends operating that particular day. If none of the equipment is used during a calendar day, the operating log shall note that the facility did not operate that day.
2. At the end of each day, record the amount (in tons) of material loaded into trucks in this operation during that working day.

Authority for Requirement: Iowa DNR Construction Permit 10-A-295-S1

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 209

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| 209 | Salt Loader to Trucks | Salt | 150 tons/hr. | 10-A-296-S1 |

Applicable Requirements

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

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

Pollutant: Fugitive Dust

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

Authority for Requirement: Iowa DNR Construction Permit 10-A-296-S1
567 IAC 23.3(2)"c"

Operational Limits & Requirements

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

Hours of operation:

1. The operation of this unit shall be limited to the time period between 6:00 AM and 10:00 PM each operating day.

Process throughput:

1. No more than 1600 tons of material shall be loaded into trucks in this operation each working day.
2. One of either Loader EP 208 or EP 209 is authorized to be operated at the far west barge unloading location, whereas both can be operated at the east barge area.

Reporting & Record keeping:

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

1. For each operating day, record the time the equipment at the Roquette America Railroad facility started operating and ends operating that particular day. If none of the equipment is used during a calendar day, the operating log shall note that the facility did not operate that day.
2. At the end of each day, record the amount (in tons) of material loaded into trucks in this operation during that working day.

Authority for Requirement: Iowa DNR Construction Permit 10-A-296-S1

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 210

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| 210 | East Haul Road Traffic | Truck Traffic | 64 trucks/day | 10-A-298-S1 |

Applicable Requirements

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

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

Pollutant: Fugitive Dust

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

Authority for Requirement: Iowa DNR Construction Permit 10-A-298-S1
567 IAC 23.3(2)"c"

Operational Limits & Requirements

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

Hours of operation:

1. The operation of this unit shall be limited to the time period between 6:00 AM and 10:00 PM each operating day.

Process throughput:

1. The unpaved portion of this haul road shall have a maximum silt content of 6%.
2. The paved surface of this haul road shall have a maximum silt loading of 1.06%.
3. The maximum number of truck round trips on this road shall not exceed 64 per day.
4. The owner/operator shall add dust suppressant to the unpaved portion of this haul road to reduce fugitive dust by 80%.

Reporting & Record keeping:

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

1. For each operating day, record the time the equipment at the Roquette America Railroad facility started operating and ends operating that particular day. If none of the equipment is used during a calendar day, the operating log shall note that the facility did not operate that day.

2. The owner/operator of this road shall take samples monthly of the silt content of the unpaved portion of this road. If after twelve (12) months, all samples have shown compliance with the appropriate standard, sampling may be reduced to quarterly. If at any time, a quarterly sample exceeds the appropriate limit, sampling shall return to monthly until twelve (12) consecutive samples show compliance. The sampling shall be performed in accordance to the methodology outlined in USEPA's AP-42 Appendix C.1 and analysis performed in accordance with Appendix C.2 of the same document.
3. The owner/operator of this road shall take samples monthly of the silt loading of the paved portion of this road. If after twelve (12) months, all samples have shown compliance with the appropriate standard, sampling may be reduced to quarterly. If at any time, a quarterly sample exceeds the appropriate limit, sampling shall return to monthly until twelve (12) consecutive samples show compliance. The sampling shall be performed in accordance to the methodology outlined in USEPA's AP-42 Appendix C.1 and analysis performed in accordance with Appendix C.2 of the same document.
4. At the end of each day, record the number of truck round trips that were taken on this road during that day.
5. Record the date, type and amount of dust suppressant added to the unpaved portions of this haul road.

Authority for Requirement: Iowa DNR Construction Permit 10-A-298-S1

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 211

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| 211 | West Haul Road Traffic | Truck Traffic | 64 trucks/day | 10-A-299-S1 |

Applicable Requirements

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

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

Pollutant: Fugitive Dust

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

Authority for Requirement: Iowa DNR Construction Permit 10-A-299-S1
567 IAC 23.3(2)"c"

Operational Limits & Requirements

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

Hours of operation:

1. The operation of this unit shall be limited to the time period between 6:00 AM and 10:00 PM each operating day.

Process throughput:

1. The unpaved portion of this haul road shall have a maximum silt content of 6%.
2. The paved surface of this haul road shall have a maximum silt loading of 1.06%.
3. The maximum number of truck round trips on this road shall not exceed 64 per day.
4. The owner/operator shall add dust suppressant to the unpaved portion of this haul road to reduce fugitive dust by 80%.

Reporting & Record keeping:

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

1. For each operating day, record the time the equipment at the Roquette America Railroad facility started operating and ends operating that particular day. If none of the equipment is used during a calendar day, the operating log shall note that the facility did not operate that day.

2. The owner/operator of this road shall take samples monthly of the silt content of the unpaved portion of this road. If after twelve (12) months, all samples have shown compliance with the appropriate standard, sampling may be reduced to quarterly. If at any time, a quarterly sample exceeds the appropriate limit, sampling shall return to monthly until twelve (12) consecutive samples show compliance. The sampling shall be performed in accordance to the methodology outlined in USEPA's AP-42 Appendix C.1 and analysis performed in accordance with Appendix C.2 of the same document.
3. The owner/operator of this road shall take samples monthly of the silt loading of the paved portion of this road. If after twelve (12) months, all samples have shown compliance with the appropriate standard, sampling may be reduced to quarterly. If at any time, a quarterly sample exceeds the appropriate limit, sampling shall return to monthly until twelve (12) consecutive samples show compliance. The sampling shall be performed in accordance to the methodology outlined in USEPA's AP-42 Appendix C.1 and analysis performed in accordance with Appendix C.2 of the same document.
4. At the end of each day, record the number of truck round trips that were taken on this road during that day.
5. Record the date, type and amount of dust suppressant added to the unpaved portions of this haul road.

Authority for Requirement: Iowa DNR Construction Permit 10-A-299-S1

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 213, 214, 251

Associated Equipment

| Emission Point | Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|-----------------------|----------------------|----------------------------------|---------------------|------------------------|----------------------------|
| 213 | 213 | Coal/Coke Pile | Coal, Coke | 4.59 Acres | 10-A-293 |
| 214 | 214 | Salt Pile | Salt | 2.30 Acres | 10-A-294 |
| 215 | 215 | Coal/Coke Pile | Cola, Coke | 22,000 ft ² | 11-A-452 |

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: Fugitive Dust

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

Authority for Requirement: Iowa DNR Construction Permits 10-A-293, 10-A-294, & 11-A-452
567 IAC 23.3(2)"c"

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Refineries A & B Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|----------------------------------|--|
| 7-21 | AB-2 | Carbon Receiver Tank | 96-A-1038-S4 |
| 16-26 | AB-19 | Sodium Bisulfate Tank | 97-A-665 |
| 16-31 | AB-3 | Syrup Spray Dryer | 75-A-179-S1 |
| 16-34 | AB-21 | DE Bulk Bag System | 01-A-024-S1 |
| 19-1 | AB-22 | Bag Packager | 02-A-158-S2 |
| | AB-24 | Bagger | |
| 19-2 | 19-2 | Bag Handling System | 10-A-478 |
| 64-A | AB-4A | B Syrup Spray Dryer | 73-A-208-S2 |
| | AB-4B | B Syrup Spray Dryer Burner | |
| 64-1 | 64-1 | Flow Aid Hopper | 10-A-477 |

Emission Point ID Number: 7-21

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| AB-2 | Carbon Receiver Tank | CE 7-21: Wet Scrubber | Carbon | 2.5 tons/hr. | 96-A-1038-S4 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 96-A-1038-S4
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.30 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 96-A-1038-S4

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 96-A-1038-S4
567 IAC 23.3(2)"a"

Operational Limits & Requirements

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

Process throughput:

1. The yearly carbon transfer rate shall not exceed 1,648 tons per rolling twelve (12) month total.

Reporting & Record keeping:

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

1. The date, railcar identification number, the hours of carbon transfer, and the total weight of carbon in the railcar. In addition, the carbon transfer rate (in lbs/hr.) shall be calculated for each railcar.
2. After the first twelve (12) months of operation, determine the cumulative amount of carbon transferred (in tons/yr.) on a rolling twelve (12) month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 96-A-1038-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 56.5

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (scfm): 850

Exhaust Temperature (°F): 100

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 96-A-1038-S4

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 16-26

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| AB-19 | Sodium Bisulfate Tank | Sodium Bisulfate | 1.5 tons/hr. | 97-A-665 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 20%

Authority for Requirement: Iowa DNR Construction Permit 97-A-665
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 0.70 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 97-A-665

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 97-A-665
567 IAC 23.3(2)"a"

Pollutant: Sulfur

Emission Limit(s): 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 97-A-665
567 IAC 23.3(3)"e"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 78
- Stack Opening, (inches, dia.): 8
- Exhaust Flow Rate (acfm): 1,300
- Exhaust Temperature (°F): 75
- Discharge Style: NA*
- Authority for Requirement: Iowa DNR Construction Permit 97-A-665
- * The facility states that the discharge for this stack is vertical.

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

Monitoring Requirements

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

Opacity:

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

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 readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 16-31**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| AB-3 | Syrup Spray Dryer | CE AB-3: Wet Scrubber | Carbon | 2.5 tons/hr. | 75-A-179-S1 |

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 75-A-179-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 75-A-179-S1
567 IAC 23.3(2)"d"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 81

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (scfm): 31,500

Exhaust Temperature (°F): 190

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 75-A-179-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 16-34**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--|---------------------|-----------------------|----------------------------|
| AB-21 | DE Bulk Bag System | CE AB-21a: Baghouse CE AB-21b: Baghouse | Diatomaceous Earth | 0.3 tons/hr. | 01-A-024-S1 |

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-024-S1
567 IAC 23.3(2)"d"

⁽¹⁾If visible emissions are observed other than startup, shutdown, or malfunction a stack test may be required to demonstrate compliance with the particulate standard. This standard is in lieu of an initial compliance test for PM₁₀.

Pollutant: PM₁₀

Emission Limit(s): 0.02 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 01-A-024-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-024-S1
567 IAC 23.3(2)"a"

Operational Limits & Requirements

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

Process throughput:

1. The yearly DE usage for this emission unit shall not exceed 360 tons/yr.

Reporting & Record keeping:

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

1. Determine the cumulative amount of DE used (in tons/yr.) on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 01-A-024-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 80
Stack Opening, (inches, dia.): 4
Exhaust Flow Rate (scfm): 200
Exhaust Temperature (°F): 150
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 01-A-024-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 19-1**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| AB-22 | Bag Packager | AB-22: Baghouse | Sweeteners | 5,420 lbs/hr. | 02-A-158-S2 |
| AB-24 | Bagger | AB-23: Baghouse | Sweeteners | 1,875 lbs/hr. | |

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 02-A-158-S2
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.34 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 02-A-158-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.34 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 02-A-158-S2
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 77.4
Stack Opening, (inches, dia.): 14
Exhaust Flow Rate (scfm): 2,000
Exhaust Temperature (°F): 95
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 02-A-158-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 19-2

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| 19-2 | Bag Handling System | 19-2: Baghouse | Solulys, CSS | 3.65 tons/hr. | 10-A-478 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 10-A-478
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.17 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 10-A-478

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 10-A-478
567 IAC 23.4(7)

Operational Limits & Requirements

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

Control equipment parameters:

1. The facility shall operate the baghouse (CE 19-2) according to manufacturer specifications and maintenance schedule.

Reporting & Record keeping:

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

1. The facility shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the baghouse (CE 19-2).

Authority for Requirement: Iowa DNR Construction Permit 10-A-478

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 29
- Stack Opening, (inches, dia.): 14
- Exhaust Flow Rate (scfm): 2,000
- Exhaust Temperature (°F): 95
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: Iowa DNR Construction Permit 10-A-478

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

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 64-A

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|-------------------------|-----------------------|----------------------------|
| AB-4A | B Syrup Spray Dryer | AB-4: Wet Scrubber | Corn Syrup, Steep Water | 3.125 tons/hr. | 73-A-208-S2 |
| AB-4B | B Syrup Spray Dryer Burner | | Natural Gas | 15 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(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 73-A-208-S2
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 6.94 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 73-A-208-S2

Pollutant: Particulate Matter

Emission Limit(s): 6.94 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 73-A-208-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.70 lb./hr., 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 73-A-208-S2
567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

Process throughput:

1. This emission unit is limited to firing on natural gas only.
2. The maximum amount of Solulys produced by the emission units venting through emission point EP 64-A shall not exceed 6500 metric tons per 12-month rolling period.
3. The maximum amount of corn syrup solids (CSS) produced by the emission units venting through emission point EP 64-A shall not exceed $[19,868 - 1.9 \times \text{Solulys}_{\text{prod}}]$ metric tons per 12-month rolling period. Where, $\text{Solulys}_{\text{prod}}$ equals the amount of Solulys produced per 12-month rolling period, in metric tons⁽²⁾.

⁽²⁾ Based upon the above equation the maximum amount of CSS produced annually is 19,868 metric tons, should no Solulys be produced; and 7583 metric tons should the maximum amount of Solulys be produced.

Reporting & Record keeping:

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

1. Determine the total amount of Solulys produced by the emission units venting through emission point EP 64-A for each month of operation.
2. Determine the amount of Solulys produced by the emission units venting through emission point EP 64-A on a rolling 12-month basis for each month of operation.
3. Determine the total amount of corn syrup solids (CSS) produced by the emission units venting through emission point EP 64-A for each month of operation.
4. Determine the amount of corn syrup solids (CSS) produced by the emission units venting through emission point EP 64-A on a rolling 12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 73-A-208-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 81

Stack Opening, (inches, dia.): 36

Exhaust Flow Rate (scfm): 45,339

Exhaust Temperature (°F): 110

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 73-A-208-S2

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

Monitoring Requirements

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

Stack Testing:

Pollutant – PM₁₀

Stack Test to be Completed by – 9/26/2018

Test Method – 40 CFR 51 Appendix M 201A w/ 202

Authority for Requirement – 567 IAC 22.108(3)"b"

Pollutant – Particulate Matter

Stack Test to be Completed by – 9/26/2018

Test Method – 40 CFR 06 Appendix A Method 5, 40 CFR 51 Appendix M Method 202

Authority for Requirement – 567 IAC 22.108(3)"b"

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
(Required for Particulate Matter emissions)

Authority for Requirement: 567 IAC 22.108(3)

| | |
|---------------------------------------|--|
| III. Performance Criteria | |
| A. Data Representativeness | Pressure drop less than 0.5 Bar or greater than 1.5 Bar would indicate a decrease in the performance of the scrubber and potentially indicate an increase of particulate emissions. |
| B. Verification of Operational Status | Records of pressure drop readings will be maintained for five years. |
| C. QA/QC Practices and Criteria | Pressure gauges will be maintained using procedures that take into account manufacturer's specifications. Scrubber will be maintained as specified in the facility's operation and maintenance plan. |
| D. Monitoring Frequency | The pressure drop readings shall be conducted daily during a period when the emission unit on this emission point is in operation. If pressure drop falls out of the range specified above, corrective action shall be taken as soon as possible, but no later than eight hours from observation. |
| E. Data Collection Procedures | Electronic or hard copy of daily differential pressure readings will be available upon request. Corrective actions resulting from excursions will be recorded. |
| IV. Justification | Pressure differential was selected as the performance indicator because it demonstrates the proper operating conditions of this control device and therefore the optimal particulate control performance. |

Emission Point ID Number: 64-1

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| 64-1 | Flow Aid Hopper | 64-1: Baghouse | Silica | 0.055 tons/hr. | 10-A-477 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 10-A-477
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.05 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 10-A-477

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 10-A-477
567 IAC 23.4(7)

Operational Limits & Requirements

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

Control equipment parameters:

1. The facility shall operate the baghouse (CE 64-1) according to manufacturer specifications and maintenance schedule.

Reporting & Record keeping:

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

1. The facility shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the baghouse (CE 64-1).

Authority for Requirement: Iowa DNR Construction Permit 10-A-477

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 40
- Stack Opening, (inches, dia.): 4
- Exhaust Flow Rate (scfm): 500
- Exhaust Temperature (°F): 70
- Discharge Style: Horizontal
- Authority for Requirement: Iowa DNR Construction Permit 10-A-477

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

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

Refinery C Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|----------------------------------|--|
| 66-18 | RC-2 | Carbon Regeneration Furnace #1 | 77-A-149-S6 |
| 66-21 | RC-5 | Soda Ash Storage | 97-A-599 |
| 66-27 | RC-3 | Filter Aid Storage | NA |
| 66-37 | RC-16 | Carbon Regeneration Furnace #2 | 01-A-086-S1 |

Emission Point ID Number: 66-18**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|------------------------|--------------------------------|----------------------------|
| RC-2 | Carbon Regeneration Furnace #1 | RC-2: Scrubber | Carbon/ Natural Gas | 0.625 tons/hr./ 5 MMBtu/hr. | 77-A-149-S6 |

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 77-A-149-S6
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.47 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 77-A-149-S6

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 77-A-149-S6
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 3.8 lb./hr., 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 77-A-149-S6
567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

Process throughput:

1. The following Operation limits shall apply to this emission unit:
 - a. The throughput shall not exceed 15 tons/day.
 - b. The fuel used shall be either natural gas or LP gas.
 - c. The combined throughput of Carbon Regeneration Furnace #1 and Carbon Regeneration Furnace #2 shall not exceed 37.5 tons/day.

Reporting & Record keeping:

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

1. The following records shall be kept for this emission unit:
 - a. The daily throughput, in tons/day, of Carbon Regeneration Furnace #1.
 - b. The combined daily throughput, in tons/day, of Carbon Regeneration Furnace #1 and Carbon Regeneration Furnace #2.

Authority for Requirement: Iowa DNR Construction Permit 77-A-149-S6

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 151

Stack Opening, (inches, dia.): 20

Exhaust Flow Rate (scfm): 2,240

Exhaust Temperature (°F): 165

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 77-A-149-S6

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 66-21

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| RC-5 | Soda Ash Storage | RC-5: Scrubber | Soda Ash | 15 tons/hr. | 97-A-599 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 20%

Authority for Requirement: Iowa DNR Construction Permit 97-A-599
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 97-A-599
567 IAC 23.3(2)"a"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 102

Stack Opening, (feet, dia.): 0.833

Exhaust Flow Rate (scfm): 435

Exhaust Temperature (°F): 115

Discharge Style: NA

Authority for Requirement: Iowa DNR Construction Permit 97-A-599

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

Monitoring Requirements

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

Opacity:

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 66-27

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| RC-3 | Filter Aid Storage | RC-3: Baghouse | Diatomaceous Earth | 10 tons/hr. | NA |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 19.2 lbs./hr.⁽¹⁾

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

⁽¹⁾ based on a process weight rate of 10 tons/hr.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 66-37

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|------------------------|-----------------------------------|----------------------------|
| RC-16 | Carbon Regeneration Furnace #2 | RC-16: Scrubber | Carbon/ Natural Gas | 1.08 tons/hr./ 13.15 MMBtu/hr. | 01-A-086-S1 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-086-S1
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 1.02 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 01-A-086-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-086-S1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 4.56 lb./hr., 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 01-A-086-S1
567 IAC 23.3(3)"e"

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 22.7 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 01-A-086-S1

Operational Limits & Requirements

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

Process throughput:

1. The following Operation limits shall apply to this emission unit:
 - a. The throughput shall not exceed 26 tons/day.
 - b. The fuel used shall be either natural gas or LP gas.
 - c. The combined throughput of Carbon Regeneration Furnace #1 and Carbon Regeneration Furnace #2 shall not exceed 37.5 tons/day.

Reporting & Record keeping:

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

1. The following records shall be kept for this emission unit:
 - a. The daily throughput, in tons/day, of Carbon Regeneration Furnace #1.
 - b. The combined daily throughput, in tons/day, of Carbon Regeneration Furnace #1 and Carbon Regeneration Furnace #2.

Authority for Requirement: Iowa DNR Construction Permit 01-A-086-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 151

Stack Opening, (inches, dia.): 28

Exhaust Flow Rate (scfm): 6,980

Exhaust Temperature (°F): 280

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-086-S1

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

Monitoring Requirements

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

Stack Testing:

Pollutant – Carbon Monoxide (CO)

Stack Test to be Completed by – 9/26/2018

Test Method – 40 CFR 60, Appendix A, Method 10

Authority for Requirement – 567 IAC 22.108(3)"b"

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Refinery D Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|----------------------------------|--|
| 84-D | RD-1 | Refinery D House Vacuum System | 94-A-602 |
| 84-10 | RD-2 | Drying | 94-A-603-S1 |
| | RD-3 | Dedusting | |
| | RD-4 | Reclaim Tank | |

Emission Point ID Number: 84-D

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| RD-1 | Refinery D House Vacuum System | RD-1: Baghouse | Dextrose | 0.5 tons/hr. | 94-A-602 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.013 gr/dscf, 0.0655 lb./hr., 0.29 ton/yr.

Authority for Requirement: Iowa DNR Construction Permit 94-A-602

Operational Limits & Requirements

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

Control equipment parameters:

1. The owner shall follow the specific startup and shutdown procedures provided by the baghouse vendor and shall maintain a record of periods of startup, shutdown or malfunction.
2. The owner shall perform routine monitoring and routine maintenance according to Vendor's specifications. A log of actual inspections observations and maintenance shall be made available to the IDNR personnel upon request.
3. Dust collected in the baghouse shall be discharge only into closed containers without creating additional air emissions.

Authority for Requirement: Iowa DNR Construction Permit 94-A-602

Reporting & Record keeping:

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

1. Record the date and time of each inspection of the baghouse associated with this emission point.
2. Record the date, time, and description each maintenance is performed on the baghouse associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 51
Stack Opening, (feet, dia.): 0.5
Exhaust Flow Rate (acfm): 600
Exhaust Temperature (°F): 68
Discharge Style: NA
Authority for Requirement: Iowa DNR Construction Permit 94-A-602

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 84-10

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| RD-2 | Drying | RD-2: Scrubber | Dextrose | 7 tons/hr. | 94-A-603-S1 |
| RD-3 | Dedusting | | Dextrose | 7 tons/hr. | |
| RD-4 | Reclaim Tank | | Dextrose | 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(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 2.1 lbs./hr., 0.01 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 94-A-603-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 155

Stack Opening, (feet, dia.): 3.0

Exhaust Flow Rate (scfm): 24,500

Exhaust Temperature (°F): 90

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 94-A-603-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Refinery E Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|----------------------------------|--|
| 82-1 | RE-1 | DE Unloading | 02-A-561-S1 |
| 82-2 | RE-2 | DE Silo Fluidizer | 02-A-562-S1 |
| 82-3 | RE-3 | DE Transfer System | 02-A-563 |

Emission Point ID Number: 82-1

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| RE-1 | DE Unloading | CE 82-1: Baghouse | Diatomaceous Earth | 7.5 tons/hr. | 02-A-561-S1 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 02-A-561-S1
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.05 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 02-A-561-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 02-A-561-S1
567 IAC 23.3(2)"a"

Operational Limits & Requirements

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

Process throughput:

1. For each shipment of diatomaceous earth (DE) to this emission unit the owner or operator shall track the date received and the quantity of the material unloaded.

Reporting & Record keeping:

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

1. The date of each DE shipment to this emission unit and the amount of DE received on that date.
Authority for Requirement: Iowa DNR Construction Permit 02-A-561-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 10
Stack Opening, (inches, dia.): 5
Exhaust Flow Rate (scfm): 565
Exhaust Temperature (°F): 70
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 02-A-561-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 82-2**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| RE-2 | DE Silo Fluidizer | CE 82-2: Baghouse | Diatomaceous Earth | 1.5 tons/hr. | 02-A-562-S1 |

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 02-A-562-S1
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.02 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 02-A-562-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 02-A-562-S1
567 IAC 23.3(2)"a"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 52.63
- Stack Opening, (inches, dia.): 5
- Exhaust Flow Rate (scfm): 240
- Exhaust Temperature (°F): 70
- Discharge Style: Vertical Obstructed
- Authority for Requirement: Iowa DNR Construction Permit 02-A-562-S1

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

Monitoring Requirements

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 82-3

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| RE-3 | DE Transfer | CE 82-3: Baghouse | Diatomaceous Earth | 1.5 tons/hr. | 02-A-563 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 02-A-563
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.03 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 02-A-563

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 02-A-563
567 IAC 23.3(2)"a"

Operational Limits & Requirements

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

Reporting & Record keeping:

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

1. Maintain records of maintenance done to EU RE-3 on a monthly basis to ensure proper operation.

Authority for Requirement: Iowa DNR Construction Permit 02-A-563

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 90
Stack Opening, (inches, dia.): 4
Exhaust Flow Rate (scfm): 395
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 02-A-563

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Refinery F Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|----------------------------------|--|
| 103-2 | RF-18 | DE Transfer | 10-A-233 |
| 107-1 | RF-4 | Tank | 99-A-083-S6 |
| | RF-4B | Tank | |
| | RF-5 | Tank | |
| | RF-6 | Dryer | |
| | RF-7 | Cooler | |
| 107-2 | RF-8 | Grinder | 99-A-084-S6 |
| | RF-9 a-1 | 12 Dedusting Pickup Points | |
| | RF-10 | House Vacuum w/ 20 Pickup Points | |
| | RF-14 | Powder Blending | |
| 107-3 | RF-15 | Carbohydrate Transfer System | 10-A-235-S1 |
| 107-4 | RF-20A | Tank | 10-A-236-S1 |
| | RF-20B | Tank | |
| | RF-20C | Tank | |
| | RF-21 | Tank | |
| | RF-22 | Dryer | |
| 107-5 | RF-23 | Carbohydrate Cooler | 10-A-237 |
| 107-6 | RF-25 | Carbohydrate Dryer | 10-A-238 |
| 107-7 | RF-26 | Carbohydrate Cooler | 10-A-239 |
| 107-8 | RF-27 | Carbohydrate Grinder | 10-A-240 |
| 107-9 | RF-28 | Dedusting | 10-A-241 |
| | RF-30 | Packaging | |
| 107-10 | RF-29 | House Vacuum | 10-A-242 |
| 107-B | RF-24 | Carbohydrate Remelt Tank | 10-A-243-S1 |
| 107-C | RF-31 | Carbohydrate Remelt Tank | 10-A-244 |
| 108-1 | RF-3 | Ethanol Storage Tank | 99-A-082 |
| 108-2 | RF-3B | Ethanol Storage Tank | 10-A-245 |
| 109-1 | RF-11 | Manual Additive Hopper/Feeder | 01-A-880-S2 |
| | RF-13 | Dedusting System 2 | |
| | RF-16 | House Vacuum | |

Emission Point ID Number: 103-2

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| RF-18 | DE Transfer | RF-18: Baghouse | Diatomaceous Earth | 0.8 tons/hr. | 10-A-233 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 10-A-233
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.004 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 10-A-233

Pollutant: Particulate Matter

Emission Limit(s): 0.004 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 10-A-233
567 IAC 23.3(2)"a"

Operational Limits & Requirements

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

Control equipment parameters:

1. The owner or operator shall inspect and maintain the baghouse according to the manufacturer's recommendation.

Reporting & Record keeping:

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

1. The owner or operator shall maintain a log of all maintenance and inspection activities. This log shall include, but may not be limited to, the date and time of each inspection of the baghouse occurs, any items identified during the inspection that need to be addressed, the date and time each maintenance activity is started, and a description of the corrective actions taken during the maintenance of the baghouse.

Authority for Requirement: Iowa DNR Construction Permit 10-A-233

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 40

Stack Opening, (inches): 18 x 24

Exhaust Flow Rate (scfm): 22

Exhaust Temperature (°F): Ambient

Discharge Style: Indoors

Authority for Requirement: Iowa DNR Construction Permit 10-A-233

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 107-1**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|-----------------------|-----------------------|----------------------------|
| RF-4 | Tank | 107-1: Scrubber | Carbohydrate | 874 gallons | 99-A-083-S6 |
| RF-4B | Tank | | Carbohydrate | 597 gallons | |
| RF-5 | Tank | | Centrate | 290 gallons | |
| RF-6 | Dryer | | Carbohydrate Crystals | 5,939 lbs./hr. | |
| RF-7 | Cooler | | Dried Carbohydrate | 5,939 lbs./hr. | |

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 99-A-083-S6
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.48 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 99-A-083-S6

Pollutant: Particulate Matter

Emission Limit(s): 0.48 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 99-A-083-S6
567 IAC 23.4(7)

Pollutant: Volatile Organic Compounds (VOC's)

Emission Limit(s): 10.37 lb./hr., 38.4 tons/yr.

Authority for Requirement: Iowa DNR Construction Permit 99-A-083-S6

Operational Limits & Requirements

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

Process throughput:

1. The emission units in this permit shall not exceed an annual production rate of 19,931 metric tons of carbohydrate per rolling twelve (12) months.

Control equipment parameters:

1. The liquid feed rate to the scrubber shall be a minimum of 5.0 cubic meters/hr. (1,320.9 gallons/hr.).
2. The inlet water temperature to the scrubber shall not exceed 15 °C.
3. Any additive added to the scrubber liquid during the compliance testing to enhance the removal efficiency of the scrubber shall be added at the same rate that it was added for the most recent accepted compliance test which demonstrated compliance with all applicable emission limitations.

Reporting & Record keeping:

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

1. Record the monthly amount of production of carbohydrate from the emission units in this permit. Calculate and record 12-month rolling total production of carbohydrate.
2. Install and continually operate a strip chart recorder or other device to continually record the scrubber liquid feed rate.
3. Install and continually operate a strip chart recorder or other device to continually record the inlet water temperature to the scrubber.
4. If an additive to the scrubber liquid is used and it is continually added to the scrubber liquid, install and continually operate a strip chart recorder or other device to continually record the additive feed rate. If an additive to the scrubber liquid is used and it is mixed with the scrubber liquid in a batch operation, record the time each batch is mixed as well as the amount of additive added to the scrubber liquid.

Authority for Requirement: Iowa DNR Construction Permit 99-A-083-S6

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 74

Stack Opening, (inches, dia.): 18

Exhaust Flow Rate (scfm): 6,900

Exhaust Temperature (°F): 120

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 99-A-083-S6

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

Monitoring Requirements

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

Stack Testing:

Pollutant – Volatile Organic Compounds
Stack Test to be Completed by – 9/26/2018
Test Method – 40 CFR 60, Appendix a, Method 25A
Authority for Requirement – 567 IAC 22.108(3)"b"

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
(Required for VOC's)

Authority for Requirement: 567 IAC 22.108(3)

**Compliance Assurance Monitoring Plan
CAM Plan for EP 107-1; Scrubber (CE107-1)**

I. Background

A. Emissions Units

Description: Three tanks (RF-4, RF-4B, RF-5), a Dryer (RF-6), and a Cooler (RF-7)
Identification: RF-4, RF-4B, RF-5, RF-6, RF-7
Facility: Roquette America, Inc.
1417 Exchange Street
Keokuk, IA 52632

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Iowa DNR Construction Permit 99-A-083-S6
Volatile Organic Compounds: 10.37 lb/hr, 38.5 tpy
Current Monitoring requirements: Continuously record scrubber liquid feed rate and inlet water temperature to scrubber. If applicable, record additive feed rate (continuous or in batch).

C. Control Technology: Scrubber

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table 1. The selected performance indicators are control device scrubber liquid feed rate and scrubber inlet water temperature.

Note: An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion is a deviation that must be reported in the Semi-Annual Monitoring Report and Annual Compliance Certification Report.

Table 1. Monitoring Approach

| General Criteria | Indicator 1 | Indicator 2 |
|---------------------------------------|--|---|
| I. Indicator | Scrubber liquid feed rate | Scrubber inlet water temperature |
| Measurement Approach | Scrubber liquid feed rate will be measured by a strip chart recorder or other device. | Scrubber inlet water temperature will be measured by a strip chart recorder or other device. |
| II. Indicator Range | Scrubber liquid feed rate will be checked daily to ensure liquid feed rate does not drop below 5 m ³ /hr (1320.9 gal/hr), except during startup, shutdown, or cleaning of control equipment.. | Scrubber inlet water temperature will be checked daily to ensure inlet water temperature does not exceed 15°C, except during startup, shutdown, or cleaning of control equipment. |
| QIP Threshold | The QIP threshold is six excursions in a six month period. | The QIP threshold is six excursions in a six month period. |
| III. Performance Criteria | | |
| A. Data Representativeness | The scrubber is designed to operate at maximum control efficiency above a specific liquid feed rate. If the feed rate drifts below the optimal efficiency range, this is an indication of the potential for increased VOC emissions. | The scrubber is designed to operate at maximum control efficiency below a specific inlet water temperature. If the inlet temperature drifts above the optimal efficiency range, this is an indication of the potential for increased VOC emissions. |
| B. Verification of Operational Status | Records of liquid feed rate readings will be maintained for five years. | Records of inlet water temperature readings will be maintained for five years. |
| C. QA/QC Practices and Criteria | Recording devices (strip chart or otherwise) will be maintained using procedures that take into account manufacturer's specifications. Scrubber will be maintained as outlined in the facility's operation and maintenance plan. | Recording devices (strip chart or otherwise) will be maintained using procedures that take into account manufacturer's specifications. Scrubber will be maintained as outlined in the facility's operation and maintenance plan. |

| | Indicator 1 | Indicator 2 |
|-------------------------------|--|---|
| D. Monitoring Frequency | <p>The liquid feed rate readings shall be recorded continuously on a strip chart or other system. Monitored daily for liquid feed rates below indicator value when the emission unit on this emission point is in operation.</p> <p>If liquid feed rate falls below the indicator specified above, corrective action shall be taken as soon as possible, but no later than eight hours from observation.</p> | <p>The inlet temperature readings shall be recorded continuously on a strip chart or other system. Monitored daily for inlet temperatures above indicator value when the emission unit on this emission point is in operation.</p> <p>If inlet temperature rises above the indicator specified above, corrective action shall be taken as soon as possible, but no later than eight hours from observation.</p> |
| E. Data Collection Procedures | <p>Electronic or hard copy of daily scrubber liquid feed rate readings (on strip chart or otherwise) will be available upon request.</p> <p>Corrective actions resulting from excursions will be recorded.</p> | <p>Electronic or hard copy of daily inlet temperature readings (on strip chart or otherwise) will be available upon request.</p> <p>Corrective actions resulting from excursions will be recorded.</p> |
| IV. Justification | <p>Liquid feed rate was selected as one of the performance indicators because it demonstrates the proper operating conditions of this control device and therefore the optimal VOC control performance.</p> | <p>Inlet water temperature was selected as one of the performance indicators because it demonstrates the proper operating conditions of this control device and therefore the optimal VOC control performance.</p> |

Emission Point ID Number: 107-2

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| RF-8 | Grinder | RF-8a: Cyclone RF-8: Baghouse | Corn Byproducts | 3.86 tons/hr. | 99-A-084-S6 |
| RF-9 | 12 Dedusting Pickup Points | RF-9: Baghouse | Corn Byproducts | 3.86 tons/hr. (each) | |
| RF-10 | House Vacuum w/ 20 Pickup Points | RF-10: Baghouse | Corn Byproducts | 3.86 tons/hr. | |
| RF-14 | Powder Blending | RF-14: Baghouse | Corn Byproducts | 0.89 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(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 99-A-084-S6
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.3 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 99-A-084-S6

Pollutant: Particulate Matter

Emission Limit(s): 0.3 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 99-A-084-S6
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 120
- Stack Opening, (inches, dia.): 24
- Exhaust Flow Rate (scfm): 7,500
- Exhaust Temperature (°F): 120
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: Iowa DNR Construction Permit 99-A-084-S6

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

Monitoring Requirements

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 107-3

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| RF-15 | Carbohydrate Transfer System | RF-15: Baghouse | Carbohydrates | 2.97 tons/hr. | 10-A-235-S1 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 10-A-235-S1
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.58 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 10-A-235-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.58 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 10-A-235-S1
567 IAC 23.4(7)

Operational Limits & Requirements

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

Control equipment parameters:

1. The owner or operator shall inspect and maintain the baghouse according to the manufacturer's recommendation.

Reporting & Record keeping:

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

1. The owner or operator shall maintain a log of all maintenance and inspection activities. This log shall include, but may not be limited to, the date and time of each inspection of the baghouse occurs, any items identified during the inspection that need to be addressed, the date and time each maintenance activity is started, and a description of the corrective actions taken during the maintenance of the baghouse.

Authority for Requirement: Iowa DNR Construction Permit 10-A-235-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 142

Stack Opening, (inches, dia.): 17

Exhaust Flow Rate (scfm): 3,000

Exhaust Temperature (°F): 100

Discharge Style: Vertical Obstructed

Authority for Requirement: Iowa DNR Construction Permit 10-A-235-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 107-4**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| RF-20A | Tank | RF-20: Scrubber | Carbohydrate | 994 gallons | 10-A-236-S1 |
| RF-20B | Tank | | Carbohydrate | 994 gallons | |
| RF-20C | Tank | | Carbohydrate | 994 gallons | |
| RF-21 | Tank | | Centrate | 1,321 gallons | |
| RF-22 | Dryer | | Carbohydrate | 8,815 lbs/hr. | |

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 10-A-236-S1
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.58 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 10-A-236-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.58 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 10-A-236-S1
567 IAC 23.4(7)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 4.68 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 10-A-236-S1

Operational Limits & Requirements

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

Control equipment parameters:

1. The liquid feed rate to the scrubber shall be a minimum of 8.0 cubic meters/hr. (2,113.4 gallons/hr.).
2. The inlet water temperature to the scrubber shall not exceed 10 °C.
3. Any additive added to the scrubber liquid during the compliance testing to enhance the removal efficiency of the scrubber shall be added at the same rate that it was added for the most recent accepted compliance test which demonstrated compliance with all applicable emission limitations.

Reporting & Record keeping:

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

1. Record the monthly amount of production of carbohydrate from the emission units in this permit. Calculate and record 12-month rolling total production of carbohydrate.
2. Install and continually operate a strip chart recorder or other device to continually record the scrubber liquid feed rate.
3. Install and continually operate a strip chart recorder or other device to continually record the inlet water temperature to the scrubber.
4. If an additive to the scrubber liquid is used and it is continually added to the scrubber liquid, install and continually operate a strip chart recorder or other device to continually record the additive feed rate. If an additive to the scrubber liquid is used and it is mixed with the scrubber liquid in a batch operation, record the time each batch is mixed as well as the amount of additive added to the scrubber liquid.

Authority for Requirement: Iowa DNR Construction Permit 10-A-236-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 92

Stack Opening, (inches, dia.): 29.5

Exhaust Flow Rate (scfm): 7,300

Exhaust Temperature (°F): 155

Discharge Style: Vertical Obstructed

Authority for Requirement: Iowa DNR Construction Permit 10-A-236-S1

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

Monitoring Requirements

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

Stack Testing:

Pollutant – Volatile Organic Compounds
Stack Test to be Completed by – 9/26/2018
Test Method – 40 CFR 60, Appendix a, Method 25A
Authority for Requirement – 567 IAC 22.108(3)"b"

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
(Required for VOC's)

Authority for Requirement: 567 IAC 22.108(3)

**Compliance Assurance Monitoring Plan
CAM Plan for EP 107-4; Scrubber (CE RF-20)**

I. Background

A. Emissions Units

Description: Four tanks (RF-20A, RF-20B, RF-20C, RF-21), and a Dryer (RF-22)
Identification: RF-20A, RF-20B, RF-20C, RF-21, RF-22
Facility: Roquette America, Inc.
1417 Exchange Street
Keokuk, IA 52632

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Iowa DNR Construction Permit 10-A-236-S1
Volatile Organic Compounds: 4.68 lb/hr
Current Monitoring requirements: Continuously record scrubber liquid feed rate and inlet water temperature to scrubber. If applicable, record additive feed rate (continuous or in batch).

C. Control Technology: Scrubber

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table 1. The selected performance indicators are control device scrubber liquid feed rate and scrubber inlet water temperature.

Note: An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion is a deviation that must be reported in the Semi-Annual Monitoring Report and Annual Compliance Certification Report.

Table 1. Monitoring Approach

| General Criteria | Indicator 1 | Indicator 2 |
|---------------------------------------|--|---|
| I. Indicator | Scrubber liquid feed rate | Scrubber inlet water temperature |
| Measurement Approach | Scrubber liquid feed rate will be measured by a strip chart recorder or other device. | Scrubber inlet water temperature will be measured by a strip chart recorder or other device. |
| II. Indicator Range | Scrubber liquid feed rate will be checked daily to ensure liquid feed rate does not drop below 8.0 m ³ /hr (2,113.4 gal/hr), except during startup, shutdown, or cleaning of control equipment.. | Scrubber inlet water temperature will be checked daily to ensure inlet water temperature does not exceed 10°C, except during startup, shutdown, or cleaning of control equipment. |
| QIP Threshold | The QIP threshold is six excursions in a six month period. | The QIP threshold is six excursions in a six month period. |
| III. Performance Criteria | | |
| A. Data Representativeness | The scrubber is designed to operate at maximum control efficiency above a specific liquid feed rate. If the feed rate drifts below the optimal efficiency range, this is an indication of the potential for increased VOC emissions. | The scrubber is designed to operate at maximum control efficiency below a specific inlet water temperature. If the inlet temperature drifts above the optimal efficiency range, this is an indication of the potential for increased VOC emissions. |
| B. Verification of Operational Status | Records of liquid feed rate readings will be maintained for five years. | Records of inlet water temperature readings will be maintained for five years. |
| C. QA/QC Practices and Criteria | Recording devices (strip chart or otherwise) will be maintained using procedures that take into account manufacturer's specifications. Scrubber will be maintained as outlined in the facility's operation and maintenance plan. | Recording devices (strip chart or otherwise) will be maintained using procedures that take into account manufacturer's specifications. Scrubber will be maintained as outlined in the facility's operation and maintenance plan. |

| | Indicator 1 | Indicator 2 |
|-------------------------------|--|---|
| D. Monitoring Frequency | <p>The liquid feed rate readings shall be recorded continuously on a strip chart or other system. Monitored daily for liquid feed rates below indicator value when the emission unit on this emission point is in operation.</p> <p>If liquid feed rate falls below the indicator specified above, corrective action shall be taken as soon as possible, but no later than eight hours from observation.</p> | <p>The inlet temperature readings shall be recorded continuously on a strip chart or other system. Monitored daily for inlet temperatures above indicator value when the emission unit on this emission point is in operation.</p> <p>If inlet temperature rises above the indicator specified above, corrective action shall be taken as soon as possible, but no later than eight hours from observation.</p> |
| E. Data Collection Procedures | <p>Electronic or hard copy of daily scrubber liquid feed rate readings (on strip chart or otherwise) will be available upon request.</p> <p>Corrective actions resulting from excursions will be recorded.</p> | <p>Electronic or hard copy of daily inlet temperature readings (on strip chart or otherwise) will be available upon request.</p> <p>Corrective actions resulting from excursions will be recorded</p> |
| IV. Justification | <p>Liquid feed rate was selected as one of the performance indicators because it demonstrates the proper operating conditions of this control device and therefore the optimal VOC control performance.</p> | <p>Inlet water temperature was selected as one of the performance indicators because it demonstrates the proper operating conditions of this control device and therefore the optimal VOC control performance.</p> |

Emission Point ID Number: 107-5

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| Rf-23 | Carbohydrate Cooler | RF-23: Baghouse | Carbohydrate | 4.41 tons/hr. | 10-A-237 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 10-A-237
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.36 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 10-A-237

Pollutant: Particulate Matter

Emission Limit(s): 0.36 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 10-A-237
567 IAC 23.4(7)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.74 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 10-A-237

Operational Limits & Requirements

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

Control equipment parameters:

1. The owner or operator shall inspect and maintain the baghouse according to the manufacturer's recommendation.

Reporting & Record keeping:

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

1. The owner or operator shall maintain a log of all maintenance and inspection activities. This log shall include, but may not be limited to, the date and time of each inspection of the baghouse occurs, any items identified during the inspection that need to be addressed, the date and time each maintenance activity is started, and a description of the corrective actions taken during the maintenance of the baghouse.

Authority for Requirement: Iowa DNR Construction Permit 10-A-237

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 92

Stack Opening, (inches, dia.): 32

Exhaust Flow Rate (scfm): 8,300

Exhaust Temperature (°F): 86

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 10-A-237

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 107-6

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| RF-25 | Carbohydrate Dryer | RF-25: Baghouse | Carbohydrate | 1.57 tons/hr. | 10-A-238 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 10-A-238
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.17 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 10-A-238

Pollutant: Particulate Matter

Emission Limit(s): 0.17 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 10-A-238
567 IAC 23.4(7)

Operational Limits & Requirements

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

Control equipment parameters:

1. The owner or operator shall inspect and maintain the baghouse according to the manufacturer's recommendation.

Reporting & Record keeping:

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

1. The owner or operator shall maintain a log of all maintenance and inspection activities. This log shall include, but may not be limited to, the date and time of each inspection of the baghouse occurs, any items identified during the inspection that need to be addressed, the date and time each maintenance activity is started, and a description of the corrective actions taken during the maintenance of the baghouse.

Authority for Requirement: Iowa DNR Construction Permit 10-A-238

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 104

Stack Opening, (inches, dia.): 32

Exhaust Flow Rate (scfm): 6,470

Exhaust Temperature (°F): 176

Discharge Style: Vertical Obstructed

Authority for Requirement: Iowa DNR Construction Permit 10-A-238

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 107-7

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| RF-26 | Carbohydrate Cooler | RF-26: Baghouse | Carbohydrate | 1.57 tons/hr. | 10-A-239 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 10-A-239
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.17 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 10-A-239

Pollutant: Particulate Matter

Emission Limit(s): 0.17 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 10-A-239
567 IAC 23.4(7)

Operational Limits & Requirements

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

Control equipment parameters:

1. The owner or operator shall inspect and maintain the baghouse according to the manufacturer's recommendation.

Reporting & Record keeping:

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

1. The owner or operator shall maintain a log of all maintenance and inspection activities. This log shall include, but may not be limited to, the date and time of each inspection of the baghouse occurs, any items identified during the inspection that need to be addressed, the date and time each maintenance activity is started, and a description of the corrective actions taken during the maintenance of the baghouse.

Authority for Requirement: Iowa DNR Construction Permit 10-A-239

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 142

Stack Opening, (inches, dia.): 17

Exhaust Flow Rate (scfm): 6,470

Exhaust Temperature (°F): 100

Discharge Style: Vertical Obstructed

Authority for Requirement: Iowa DNR Construction Permit 10-A-239

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 107-8

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| RF-27 | Carbohydrate Grinder | RF-27: Baghouse | Carbohydrate | 1.57 tons/hr. | 10-A-240 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 10-A-240
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.09 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 10-A-240

Pollutant: Particulate Matter

Emission Limit(s): 0.09 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 10-A-240
567 IAC 23.4(7)

Operational Limits & Requirements

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

Control equipment parameters:

1. The owner or operator shall inspect and maintain the baghouse according to the manufacturer's recommendation.

Reporting & Record keeping:

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

1. The owner or operator shall maintain a log of all maintenance and inspection activities. This log shall include, but may not be limited to, the date and time of each inspection of the baghouse occurs, any items identified during the inspection that need to be addressed, the date and time each maintenance activity is started, and a description of the corrective actions taken during the maintenance of the baghouse.

Authority for Requirement: Iowa DNR Construction Permit 10-A-240

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 142

Stack Opening, (inches, dia.): 18

Exhaust Flow Rate (scfm): 3,380

Exhaust Temperature (°F): 85

Discharge Style: Vertical Obstructed

Authority for Requirement: Iowa DNR Construction Permit 10-A-240

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 107-9

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| RF-28 | Dedusting | RF-28: Baghouse | Carbohydrate | 1.57 tons/hr. | 10-A-241 |
| RF-30 | Packaging | | Carbohydrate | 1.57 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(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 10-A-241
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.12 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 10-A-241

Pollutant: Particulate Matter

Emission Limit(s): 0.12 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 10-A-241
567 IAC 23.4(7)

Operational Limits & Requirements

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

Control equipment parameters:

1. The owner or operator shall inspect and maintain the baghouse according to the manufacturer's recommendation.

Reporting & Record keeping:

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

1. The owner or operator shall maintain a log of all maintenance and inspection activities. This log shall include, but may not be limited to, the date and time of each inspection of the baghouse occurs, any items identified during the inspection that need to be addressed, the date and time each maintenance activity is started, and a description of the corrective actions taken during the maintenance of the baghouse.

Authority for Requirement: Iowa DNR Construction Permit 10-A-241

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 142

Stack Opening, (inches, dia.): 20

Exhaust Flow Rate (scfm): 4,500

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Obstructed

Authority for Requirement: Iowa DNR Construction Permit 10-A-241

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 107-10

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| RF-29 | House Vacuum | RF-29: Baghouse | Process Material | 1.57 tons/hr. | 10-A-242 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 10-A-242
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.04 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 10-A-242

Pollutant: Particulate Matter

Emission Limit(s): 0.04 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 10-A-242
567 IAC 23.4(7)

Operational Limits & Requirements

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

Control equipment parameters:

1. The owner or operator shall inspect and maintain the baghouse according to the manufacturer's recommendation.

Reporting & Record keeping:

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

1. The owner or operator shall maintain a log of all maintenance and inspection activities. This log shall include, but may not be limited to, the date and time of each inspection of the baghouse occurs, any items identified during the inspection that need to be addressed, the date and time each maintenance activity is started, and a description of the corrective actions taken during the maintenance of the baghouse.

Authority for Requirement: Iowa DNR Construction Permit 10-A-242

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 148

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (scfm): 1,500

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Obstructed

Authority for Requirement: Iowa DNR Construction Permit 10-A-242

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 107-B

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| RF-24 | Carbohydrate Remelt Tank | Carbohydrate | 4.41 tons/hr. | 10-A-243-S1 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 10-A-243-S1
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.34 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 10-A-243-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.34 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 10-A-243-S1
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 142
- Stack Opening, (inches, dia.): 16
- Exhaust Flow Rate (scfm): 800
- Exhaust Temperature (°F): 149
- Discharge Style: Vertical Obstructed
- Authority for Requirement: Iowa DNR Construction Permit 10-A-243-S1

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

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 107-C

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| RF-31 | Carbohydrate Remelt Tank | Carbohydrate | 1.57 tons/hr. | 10-A-244 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 10-A-244
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.07 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 10-A-244

Pollutant: Particulate Matter

Emission Limit(s): 0.07 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 10-A-244
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 92
- Stack Opening, (inches, dia.): 16
- Exhaust Flow Rate (scfm): 800
- Exhaust Temperature (°F): 140
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: Iowa DNR Construction Permit 10-A-244

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

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 108-1

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| RF-3 | Ethanol Storage Tank | Ethanol | 5,900 gallons | 99-A-082 |

Applicable Requirements

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

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

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

Operational Limits & Requirements

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

Process throughput:

1. The tank's capacity shall be less than 40 m³.

Authority for Requirement: Iowa DNR Construction Permit 99-A-082

Reporting & Record keeping:

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

1. The owner/operator shall keep records showing the maximum capacity of the storage tank.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 16
Stack Opening, (inches, dia.): 12
Exhaust Flow Rate (scfm): Natural Vent
Exhaust Temperature (°F): Ambient
Discharge Style: NA
Authority for Requirement: Iowa DNR Construction Permit 99-A-082

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 108-2

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| RF-3B | Ethanol Storage Tank | Ethanol | 12,950 gallons | 10-A-245 |

Applicable Requirements

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

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

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

Operational Limits & Requirements

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

Process throughput:

1. The throughput of this unit shall not exceed a maximum of 2,985,000 kilograms (kg) per twelve (12) month period, rolled monthly.

Reporting & Record keeping:

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

1. At the end of each month, record the throughput, in kilograms (kg), of material through this unit over the previous month.
2. At the end of each month, record the throughput, in kilograms (kg), of material through this unit over the previous twelve (12) months.

Authority for Requirement: Iowa DNR Construction Permit 10-A-245

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 16
- Stack Opening, (inches, dia.): 12
- Exhaust Flow Rate (scfm): Displacement
- Exhaust Temperature (°F): Ambient
- Discharge Style: Vertical Obstructed
- Authority for Requirement: Iowa DNR Construction Permit 10-A-245

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

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 109-1**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| RF-11 | Manual Additive Hopper/Feeder | CE 109-1: Baghouse | Additive | 110 lb./hr. | 01-A-880-S2 |
| RF-13 | Dedusting System 2 | | Additive | 2.7 tons/hr. | |
| RF-16 | House Vacuum | | Additive | 2.7 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(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-880-S2
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.28 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 01-A-880-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.28 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-880-S2
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 39
Stack Opening, (inches, dia.): 16
Exhaust Flow Rate (scfm): 4,700
Exhaust Temperature (°F): 70
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 01-A-880-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Roads Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|-----------------------|----------------------|------------------------------|---------------------------------|
| P-F-1 | PLN-1 | Plant Roads and Parking Lots | NA |

Emission Point ID Number: P-F-1

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|---------------|------------------------------|-----------------|----------------|---------------------|
| PLN-1 | Plant Roads and Parking Lots | Vehicle Traffic | 58484 VMT/yr. | NA |

Applicable Requirements

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

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

Pollutant: Fugitive Dust

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Starch Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|----------------------------------|--|
| 20-A-2 | ST-01 | #1 Bin Storage | NA |
| 20-A-3-1 | ST-20 | Pneu-Vac Blower System | 09-A-710-S1 |
| 20-A-3-3 | ST-21 | House Vacuum | NA |
| 20-A-4 | ST-02 | #2 Bin Storage | NA |
| 20-A-5 | ST-03 | #3 Bin Storage | NA |
| 20-A-7 | ST-04 | #4 Bin Storage | NA |
| 20-A-9 | ST-05 | #5 Bin Storage | NA |
| 20-A-11 | ST-06 | #6 Bin Storage | NA |
| 20-A-13 | ST-07 | #7 Bin Storage | 13-A-073 |
| 20-A-15 | ST-08 | #8 Bin Storage | 98-A-376-S2 |
| 20-A-17 | ST-09 | #9 Bin Storage | 98-A-377-S2 |
| 61-1 | ST-17 | #2 P&M Starch Dryer | 01-A-1031-S1 |
| 61-4 | ST-18 | Corn Starch Flash Dryer #1 | 09-A-633 |
| 61-3 | ST-24 | Building #61 Exhaust Vents | NA |
| 61-5 | | | |
| 63-1 | ST-23 | Palletizer | NA |
| 63-2 | ST-19 | House Vacuum | NA |
| 63-4 | ST-10 | Bulk Starch Loadout | 82-A-075 |
| 63-5 | ST-11 | #1 Packing Room (Bagging) | NA |
| 63-6 | ST-12 | #1 Starch Storage/Packing Bin | NA |
| 63-7 | ST-13 | #2 Starch Storage Bin | 78-A-179 |
| 63-8 | ST-14 | Bagging Room | 85-A-093 |
| 63-10 | ST-15 | #12 Starch Bin | 81-A-152-S1 |
| 63-12 | ST-16 | Reclaim Starch System | 89-A-071 |

Emission Point ID Numbers: 20-A-2, 20-A-3-3, 20-A-4, 20-A-5, 20-A-7, 20-A-9, 20-A-11, 20-A-13, 61-3, 61-5, 63-1, 63-2, 63-5, 63-6

Associated Equipment

| Emission Point | Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|-----------------------|----------------------|-----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| 20-A-2 | ST-01 | #1 Bin Storage | ST-01: Baghouse | Corn Starch | 7 tons/hr. | NA |
| 20-A-3-3 | ST-21 | House Vacuum | ST-21: Baghouse | Corn Starch | 0.5 tons/hr. | NA |
| 20-A-4 | ST-02 | #2 Bin Storage | ST-02:Baghouse | Corn Starch | 7 tons/hr. | NA |
| 20-A-5 | ST-03 | #3 Bin Storage | ST-03: Baghouse | Corn Starch | 7 tons/hr. | NA |
| 20-A-7 | ST-04 | #4 Bin Storage | ST-04: Baghouse | Corn Starch | 7 tons/hr. | NA |
| 20-A-9 | ST-05 | #5 Bin Storage | ST-05: Baghouse | Corn Starch | 7 tons/hr. | NA |
| 20-A-11 | ST-06 | #6 Bin Storage | ST-06: Baghouse | Corn Starch | 7 tons/hr. | NA |
| 61-3 | ST-24 | Building #61 | NA | Starch | 15 tons/hr. | NA |
| 61-5 | | | NA | | | NA |
| 63-1 | ST-23 | Palletizer | NA | Starch | 15 tons/hr. | NA |
| 63-2 | ST-19 | House Vacuum | ST-19: Baghouse | Corn Starch | 0.5 tons/hr. | NA |
| 63-5 | ST-11 | #1 Packing Room (Bagging) | ST-11: Baghouse | Corn Starch | 0.5 tons/hr. | NA |
| 63-6 | ST-12 | #1 Starch Storage/ Packing Bin | ST-12: Baghouse | Corn Starch | 15 tons/hr. | NA |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7)

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

(Required for ST-01, ST-21, ST-02, ST-03, ST-04, ST-05, ST-06, ST-19, ST-11, ST 12)

Compliance Assurance Monitoring (CAM) Plan Required?

Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 20-A-3-1

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| ST-20 | Pneu-Vac Blower System | ST-20: Baghouse | Corn Starch | 20 tons/hr. | 09-A-710-S1 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 09-A-710-S1
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.11 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 09-A-710-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 09-A-710-S1
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 30
- Stack Opening, (inches, dia.): 8.25
- Exhaust Flow Rate (scfm): 2,000
- Exhaust Temperature (°F): 100
- Discharge Style: Downward
- Authority for Requirement: Iowa DNR Construction Permit 09-A-710-S1

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

Monitoring Requirements

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 20-A-13

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| ST-07 | #7 Bin Storage | ST-07: Cartridge Filter | Corn Starch | 7 tons/hr. | 13-A-073 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): No Visible Emissions

Authority for Requirement: Iowa DNR Construction Permit 13-A-073
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 0.052 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 13-A-073

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 13-A-073
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 85.5

Stack Opening, (inches): 8 x 8

Exhaust Flow Rate (scfm): 2,000

Exhaust Temperature (°F): 80

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 13-A-073

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

Monitoring Requirements

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

Opacity:

Visible emissions shall be observed on a weekly basis to ensure none occur when the emission unit on this emission point is at or near full capacity. If visible emissions are 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 visible emissions readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 20-A-15

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| ST-08 | #8 Bin Storage | ST-08: Baghouse | Corn Starch | 7 tons/hr. | 98-A-376-S2 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): No Visible Emissions

Authority for Requirement: Iowa DNR Construction Permit 98-A-376-S2
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 0.052 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 98-A-376-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 98-A-376-S2
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 85.9

Stack Opening, (inches): 8 x 8

Exhaust Flow Rate (scfm): 2,000

Exhaust Temperature (°F): 80

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 98-A-376-S2

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

Monitoring Requirements

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

Opacity:

Visible emissions shall be observed on a weekly basis to ensure none occur when the emission unit on this emission point is at or near full capacity. If visible emissions are 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 visible emissions readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 20-A-17

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| ST-09 | #9 Bin Storage | ST-09: Baghouse | Corn Starch | 7 tons/hr. | 98-A-377-S2 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): No Visible Emissions

Authority for Requirement: Iowa DNR Construction Permit 98-A-377-S2
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 0.052 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 98-A-377-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 98-A-377-S2
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 85.9

Stack Opening, (inches): 8 x 8

Exhaust Flow Rate (scfm): 2,000

Exhaust Temperature (°F): 80

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 98-A-377-S2

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

Monitoring Requirements

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

Opacity:

Visible emissions shall be observed on a weekly basis to ensure none occur when the emission unit on this emission point is at or near full capacity. If visible emissions are 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 visible emissions readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 61-1

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| ST-17 | #2 P&M Starch Dryer | ST-17: Scrubber | Corn Starch | 5.5 tons/hr. | 01-A-1031-S1 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-1031-S1
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 2.57 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 01-A-1031-S1

Pollutant: Particulate Matter

Emission Limit(s): 22.75 lb/hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-1031-S1
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 9.0 lb./hr., 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 01-A-1031-S1
567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

Control equipment parameters:

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

Reporting & Record keeping:

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

- 1. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 01-A-1031-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 119

Stack Opening, (inches, dia.): 42

Exhaust Flow Rate (scfm): 31,600

Exhaust Temperature (°F): 110

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-1031-S1

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

Monitoring Requirements

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

Stack Testing:

Pollutant – Particulate Matter

Stack Test to be Completed by – 9/26/2018

Test Method - 40 CFR 60, Appendix A, Method 5, 40 CFR 51 Appendix M Method 202

Authority for Requirement – 567 IAC 22.108(3)"b"

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
(Required for Particulate Matter)

Authority for Requirement: 567 IAC 22.108(3)

**Compliance Assurance Monitoring Plan
CAM Plan for EP 61-1; Scrubber (ST-17)**

I. Background

A. Emissions Units

Description: #2 P&M Starch Dryer
 Identification: ST-17
 Facility: Roquette America, Inc.
 1417 Exchange Street
 Keokuk, IA 52632

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Iowa DNR Construction Permit 01-A-1031
 Particulate emission limit: PM: 22.75 lb/hr.
 PM₁₀: 2.57 lb/hr
 Opacity emission limit: 40%
 Current Monitoring requirements: Daily visible emission (NVE) observations

C. Control Technology: Scrubber

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table 1.

Note: An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion is a deviation that must be reported in the Semi-Annual Monitoring Report and Annual Compliance Certification Report.

Table 1. Monitoring Approach

| General Criteria | |
|----------------------|---|
| I. Indicator | Differential pressure across the control device |
| Measurement Approach | Differential pressure measured across the control device by a differential pressure gauge. |
| II. Indicator Range | Pressure drop will be checked daily when operating to ensure that the pressure drop is in the range of 0.5 to 1.5 Bar during operation of the unit, except during periods of startup, shutdown, or cleaning of control equipment. |
| QIP Threshold | The QIP threshold is six excursions in a six month period. |

| | |
|---------------------------------------|--|
| III. Performance Criteria | |
| A. Data Representativeness | Pressure drop less than 0.5 Bar or greater than 1.5 Bar would indicate a decrease in the performance the scrubber and potentially indicate an increase of particulate emissions. |
| B. Verification of Operational Status | Records of pressure drop readings will be maintained for five years. |
| C. QA/QC Practices and Criteria | Pressure gauges will be maintained using procedures that take into account manufacturer's specifications. Scrubber will be maintained as specified in the Title V permit. |
| D. Monitoring Frequency | The pressure drop readings shall be conducted daily during a period when the emission unit on this emission point is in operation. If pressure drop falls out of the range specified above, corrective action shall be taken as soon as possible, but no later than eight hours from observation. |
| E. Data Collection Procedures | Electronic or hard copy of daily differential pressure readings will be available upon request. Corrective actions resulting from excursions will be recorded. |
| IV. Justification | Pressure differential was selected as the performance indicator because it demonstrates the proper operating conditions of this control device and therefore the optimal particulate control performance. |

Emission Point ID Number: 61-4

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|---------------|----------------------------|---------------------------------|--------------|----------------|---------------------|
| ST-18 | Corn Starch Flash Dryer #1 | ST-18: Cyclones (2 in parallel) | Starch | 5.43 tons/hr. | 09-A-633 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 09-A-633
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of 20% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 22.22 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 09-A-633

Pollutant: Particulate Matter

Emission Limit(s): 22.22 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 09-A-633
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.0 lb./hr., 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 09-A-633
567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

Process throughput:

1. The maximum amount of starch processed by this emission unit shall not exceed 10,850 pounds per hour.

Reporting & Record keeping:

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

1. The facility shall calculate and record the average hourly production rate (lbs/hr.) for this emission unit on a daily bases.

Authority for Requirement: Iowa DNR Construction Permit 09-A-633

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 72

Stack Opening, (inches, dia.): 36

Exhaust Flow Rate (scfm): 34,275

Exhaust Temperature (°F): 140-164

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 09-A-633

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

Monitoring Requirements

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

Stack Testing:

Pollutant – PM₁₀

Stack Test to be Completed by – 9/26/2018

Test Method - 40 CFR 51, Appendix M, 201A with 202

Authority for Requirement – 567 IAC 22.108(3)"b"

Pollutant – Particulate Matter

Stack Test to be Completed by – 9/26/2018

Test Method - 40 CFR 60, Appendix A, Method 5, 40 CFR 51 Appendix M Method 202

Authority for Requirement – 567 IAC 22.108(3)"b"

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
(Required for PM₁₀ and Particulate Matter)

Authority for Requirement: 567 IAC 22.108(3)

**Compliance Assurance Monitoring Plan
CAM Plan for EP 61-4; Cyclones (ST-18)**

I. Background

A. Emissions Units

Description: #1 P&M Starch Dryer
 Identification: ST-18
 Facility: Roquette America, Inc.
 1417 Exchange Street
 Keokuk, IA 52632

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Iowa DNR Construction Permit 09-A-633
 Particulate emission limit: PM: 22.22 lb/hr
 0.1 gr/dscf
 PM₁₀: 22.22 lb/hr
 Opacity emission limit: 40%
 Current Monitoring requirements: Daily visible emission checks; calculate and record average hourly production rate (lb/hr) for this emission unit on a daily basis

C. Control Technology: Cyclones

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table 1.

Note: An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion is a deviation that must be reported in the Semi-Annual Monitoring Report and Annual Compliance Certification Report.

Table 1. Monitoring Approach

| General Criteria | |
|----------------------|--|
| I. Indicator | Visible emissions |
| Measurement Approach | Visible emissions from the control device exhaust while the emission unit is operating. |
| II. Indicator Range | No visible emissions shall be observed, except during startup, shutdown, or cleaning of the control equipment. Visible emissions require corrective action and recordkeeping requirements. |
| QIP Threshold | The QIP threshold is six excursions in a six month period. |

| | |
|---------------------------------------|---|
| III. Performance Criteria | |
| A. Data Representativeness | Visible emissions are a key indicator that a cyclone is operating properly. Visible emissions occur when material can be seen exiting a cyclone's waste stream. |
| B. Verification of Operational Status | Records of visible emission checks will be maintained for five years. |
| C. QA/QC Practices and Criteria | The observer will be trained to detect visible emissions, but will not necessarily be Method 9 certified. Cyclones will be maintained as outlined in the Title V permit. |
| D. Monitoring Frequency | <p>Visible emission readings shall be conducted daily during a period when the emission unit on this emission point is in operation.</p> <p>If visible emissions are detected, corrective action shall be taken as soon as possible, but no later than eight hours from observation. If corrective action does not return observation to no visible emissions, then a Method 9 observation will be required.</p> <p>If weather conditions prevent the observer from conducting a visible emission observation, the observer shall note such conditions on observation sheet. At least three attempts shall be made to retake readings at approximately two hour intervals throughout the day. If weather prohibits all three attempts, an observation shall be made on the next operating day that weather permits.</p> |
| E. Data Collection Procedures | <p>Electronic or hard copy of daily visible emission readings will be available upon request.</p> <p>Corrective actions resulting from excursions will be recorded.</p> |
| IV. Justification | Visible emission detection was selected as the performance indicator because it demonstrates the proper operating conditions of this control device and therefore the optimal PM control performance. |

Emission Point ID Number: 63-4

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| ST-10 | Bulk Starch Loadout | ST-10: Baghouse | Corn Starch | 36 tons/hr. | 82-A-075 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./scf

Authority for Requirement: 567 IAC 23.4(7)

Pollutant: Particulate Matter

Emission Limit(s): 41.57 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 82-A-075
567 IAC 23.3(2)"a"

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 63-7

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| ST-13 | #2 Starch Storage Bin | ST-13: Baghouse | Corn Starch | 24 tons/hr. | 78-A-179 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: 567 IAC 23.4(7)

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 63-8

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| ST-14 | Bagging Room | ST-14: Baghouse | Corn Starch | 0.50 tons/hr. | 85-A-093 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: 567 IAC 23.4(7)

Pollutant: Particulate Matter

Emission Limit(s): 2.58 lbs./hr.⁽¹⁾

⁽¹⁾ based on a process weight rate of 0.5 tons/hr.

Authority for Requirement: Iowa DNR Construction Permit 85-A-093
567 IAC 23.3(2)"a"

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 63-10

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| ST-15 | #12 Starch Bin | ST-15: Baghouse | Corn Starch | 7 tons/hr. | 81-A-152-S1 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): No Visible Emissions⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 81-A-152-S1
567 IAC 23.3(2)"d"

⁽¹⁾ If visible emissions are observed other than startup, shutdown, or malfunction a stack test may be required to demonstrate compliance with the particulate standards.

Pollutant: PM₁₀

Emission Limit(s): 0.13 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 81-A-152-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 81-A-152-S1
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 54.6

Stack Opening, (inches, dia.): 7.9

Exhaust Flow Rate (scfm): 1,500

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 81-A-152-S1

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

Monitoring Requirements

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

Opacity:

Visible emissions shall be observed on a weekly basis to ensure none occur when the emission unit on this emission point is at or near full capacity. If visible emissions are 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 visible emissions readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 63-12

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|---------------|---------------------------|-------------------|--------------|----------------|---------------------|
| ST-16 | Reclaim Starch System | ST-16: Baghouse | Corn Starch | 3 tons/hr. | 89-A-071 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: 567 IAC 23.4(7)

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Steam & Co-Gen Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|--|--|
| 112 | 112 | Waste Heat Boiler | 08-A-280-S3 |
| 121 | 121 | CFB Boiler | 06-A-518-P2 |
| 122 | 122 | Crusher #1 | 06-A-519-S2 |
| | 122a | Receiving Hopper #1 | |
| | 122b | Receiving Conveyor #1 | |
| | 122c | Receiving Bucket Elevator #1 | |
| 123 | 123 | Crusher #2 | 06-A-520-S2 |
| | 123a | Receiving Hopper #2 | |
| | 123b | Receiving Conveyor #2 | |
| | 123c | Receiving Bucket Elevator #2 | |
| 125 | 125 | Limestone Storage Silo #1 | 06-A-522-S2 |
| 125B | 125B | Limestone Storage Silo #2 | 07-A-1560-S1 |
| 126 | 126 | Ash Silo Conveying System | 06-A-523-S2 |
| 126B | 126B | Ash Silo Conveying System | 07-A-1561-S1 |
| 126C | 126C | Ash Silo Conveying System | 07-A-1562-S1 |
| 126D | 126D | Ash Silo Conveying System | 07-A-1563-S1 |
| 127 | 127 | Ash Silo Bin Vent | 06-A-524-S1 |
| 129 | 129 | Belt Conveyor | 06-A-526-S2 |
| 131 | 131 | Bunker #1 | 06-A-528-S2 |
| 132 | 132 | Bunker #2 | 06-A-529-S2 |
| 133 | 133 | Bunker #3 | 06-A-530-S2 |
| 135 | 135 | Drag Feed Conveyor | 06-A-532-S2 |
| | 135B | Limestone Conveyor Receiving | |
| 200-1 | CG-3 | Dew Point Heater | 02-A-694-P1 |
| 201-1 | CG-4 | Diesel Starting Engine | 02-A-695-P3 |
| 201-2 | CG-2 | Combustion Turbine, Simple Cycle | 02-A-693-P1 |
| 201-5 | 201-5 | Package Boiler | 12-A-200-S2 |
| 201-6 | 201-6 | Package Boiler | 12-A-201-S2 |
| 201-8 | 201-8 | Package Boiler | 12-A-202-S2 |
| 202-1 | CG-1 | Combustion Turbine/Duct Burner, Combined Cycle | 02-A-692-P1 |

Emission Point ID Number: 112

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|---------------|---------------------------|--------------|----------------|---------------------|
| 112 | Waste Heat Boiler | Natural Gas | 21.3 MMBtu/hr. | 08-A-280-S3 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 08-A-280-S3
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.43 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 08-A-280-S3

Pollutant: Particulate Matter

Emission Limit(s): 0.43 lb./hr., 0.6 lb./MMBtu/hr.

Authority for Requirement: Iowa DNR Construction Permit 08-A-280-S3
567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppm

Authority for Requirement: Iowa DNR Construction Permit 08-A-280-S3
567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

Process throughput:

1. The Waste Heat Boiler is limited to firing on natural gas and the waste heat from the reactor.
2. All applicable operating limits set forth in NSPS Subparts A (40 CFR §60.1 – 40 CFR §60.19) and Dc (40 CFR §60.40c – 40 CFR §60.48c).

Reporting & Record keeping:

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

The owner/operator shall record the following:

1. All applicable recordkeeping set forth in NSPS Subparts A (40 CFR §60.1 – 40 CFR §60.19) and Dc (40 CFR §60.40c – 40 CFR §60.48c).
 - a. 60.48c(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.
 - b. 60.48c(g)(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO₂ standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.
2. The number of times emissions are vented through EP 113 and the amount of emissions vented through EP 113 on a rolling twelve (12) month basis.

Authority for Requirement: Iowa DNR Construction Permit 08-A-280-S3
40 CFR 60 Subparts A & Dc
567 IAC 23.1(2)"III"

NESHAP:

See "Plant Wide Condition" regarding 40 CFR 63 Subpart DDDDD – National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, and Institutional Boilers and Process Heaters.

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 60

Stack Opening, (inches, dia.): 18

Exhaust Flow Rate (scfm): 4,000

Exhaust Temperature (°F): 375

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 08-A-280-S3

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 121

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Monitoring Equipment | Raw Material | Rated Capacity | Construction Permit |
|---------------|---------------------------|--|--|----------------------|----------------|---------------------|
| 121 | CFB Boiler | 121A: Baghouse 121B: Dry Scrubber 121C: Lime Injection 121D: SNCR | 121A: CO 121B: SO ₂ 121D: Opacity | See Operating Limits | 996 MMBtu/hr. | 06-A-518P-S2 |

Applicable Requirements

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

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

BACT Limits:

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 392.6 tons/yr.⁽¹⁾, 0.09 lb/MMBtu⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 671.8 tons/yr.⁽¹⁾, 0.154 lb/MMBtu⁽³⁾

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2

⁽¹⁾ This standard is a 12-month rolling total.

⁽²⁾ This standard is a 30-day rolling average not including periods of startup, shutdown, and malfunction.

⁽³⁾ This standard is a one (1) calendar day average.

NSPS Limits:

Pollutant: Opacity

Emission Limit(s): 20% (6 minute average)⁽⁴⁾

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2

567 IAC 23.1(2)"ccc"

⁽⁴⁾ Except for one 6-minute period per hour of not more than 27% opacity.

Pollutant: Particulate Matter (Federal)

Emission Limit(s): Per 40 CFR §60.43b(h)(1) and 40 CFR §60.43b(h)(2), no owner or operator shall discharge PM emissions to the atmosphere greater than either:

1. 13 ng/J (0.030 lb./MMBTU) heat input or
2. 22 ng/J (0.051 lb./MMBTU) heat input and 0.2 percent of the combustion concentration (99.8% reduction).

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2

567 IAC 23.1(2)"ccc"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): Per 40 CFR §60.42b(k)(1), no owner or operator shall discharge SO₂ emissions to the atmosphere greater than 87 ng/J (0.20 lb./MMBTU) heat input or eight percent (8%) of the potential SO₂ emission rate (92% reduction) and 520 ng/J (1.2 lb./MMBTU) heat input.

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2
567 IAC 23.1(2)"ccc"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 0.60 lb/MMBtu heat input⁽⁵⁾

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2
567 IAC 23.1(2)"ccc"

⁽⁵⁾ Per 40 CFR §60.44b(h) and 40 CFR §60.44(i), the limit is a 30-day rolling average that includes periods of startup, shutdown, and malfunction.

Other Limits:

Pollutant: PM₁₀

Emission Limit(s): 29.88 lb/hr.

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2

Pollutant: Particulate Matter (State)

Emission Limit(s): 29.88 lb/hr.

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 149.40 lb/hr.

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 149.40 lb/hr.

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2

Pollutant: Volatile Organic Compounds (VOC's)

Emission Limit(s): 9.00 lb/hr.

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 153.38 lb/hr.

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2

Pollutant: Lead (Pb)

Emission Limit(s): 0.124 lb/hr.

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2

Pollutant: Total Reduced Sulfur (TRS)

Emission Limit(s): 2.15 lb/hr.

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2

Pollutant: Sulfuric Acid Mist (H₂SO₄)

Emission Limit(s): 4.90 lb/hr.

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2

Pollutant: Flourides (F)

Emission Limit(s): 0.69 lb/hr.

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2

Operational Limits & Requirements

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

Process throughput:

1. The Circulating Fluidized Bed (CFB) Boiler (EU-121) is limited to firing on natural gas, coal, petroleum coke, agricultural by-products (i.e., those by-products associated with corn processing, soybean processing, etc.), biomass (e.g., switch grass, sugar cane, cornstalks, etc.), untreated waste timber products (e.g., bark, sawdust, chunks of wood, etc.), waste paper products from the facility, and tire-derived fuel (TDF).
2. The sulfur content of the fuel combusted shall not exceed 6.0 percent by weight.
3. The owner or operator shall comply with the applicable operating limits set forth in 40 CFR Part 60, Subpart A – General Provisions [§60.1 - §60.19] and in 40 CFR Part 60, Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units [§60.40b - §60.49b], including those not specifically mentioned in this permit.

Control equipment parameters:

1. The owner or operator shall inspect and maintain the control equipment (CE-121a – CE-121d) according to the facility's operation and maintenance plan.

Reporting & Record keeping:

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

1. As indicated in 40 CFR §60.49b(d)(1), the owner or operator shall record and maintain records of the amount of each fuel combusted during each day and shall calculate the annual capacity factor for each fuel combusted during the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.
2. As indicated in 40 CFR §60.49b(f), the owner or operator shall maintain records of opacity.
3. The owner or operator shall maintain records of the following information for each steam generating unit operating day:
 - a. The calendar date;
 - b. The fuel(s) combusted that day;
 - c. The total amount of each fuel combusted; and
 - d. An analysis showing the sulfur content representative of the fuel combusted for that day.
4. As indicated in 40 CFR §60.49b(h), the owner or operator shall submit excess emission reports for any excess emissions that occurred during the reporting period. Excess emission reports shall be

submitted following the procedures in 567 IAC Chapter 24.

5. The owner or operator shall comply with applicable reporting and recordkeeping set forth in 40 CFR Part 60, Subpart A – *General Provisions* [§60.1 - §60.19] and in 40 CFR Part 60, Subpart Db – *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units* [§60.40b - §60.49b], including those not specifically mentioned in this permit.
6. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but it is not limited to:
 - a. The date and time any inspection and/or maintenance was performed on the control equipment;
 - b. Any issues identified during inspection;
 - c. Any issues addressed during the maintenance activities; and
 - d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2
567 IAC 23.1(2)"ccc"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 350

Stack Opening, (inches, dia.): 120

Exhaust Flow Rate (scfm): 200,138

Exhaust Temperature (°F): 185

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-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.

Monitoring Requirements

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

Continuous Emissions Monitoring:

1. NSPS SO₂, Opacity, and NO_x Emission Standards Monitoring Requirements:
 - a. The owner or operator shall continuously monitor emissions of sulfur dioxide (SO₂) discharged to the atmosphere through EP-121. Therefore, in accordance with 40 CFR §60.47b(a), the owner or operator shall install, calibrate, maintain, and operate a continuous monitoring system (CEMS) for measuring SO₂ concentrations and either O₂ or CO₂ concentrations and shall record the output of the CEMS. For units complying with the percent reduction standard, the SO₂ and either O₂ or CO₂ concentrations shall be monitored at the inlet and outlet of the SO₂ control device.
 - b. The owner or operator shall continuously monitor the opacity of emissions discharged to the atmosphere through EP-121. Therefore, in accordance with 40 CFR §60.48b(a), the owner or operator shall install, calibrate, maintain, and operate a continuous opacity

monitoring system (COMS) for measuring the opacity of emissions and shall record the output of the COMS.

- c. The owner or operator shall continuously monitor emissions of nitrogen oxides (NO_x) discharged to the atmosphere through EP-121. Therefore, in accordance with 40 CFR §60.48b(b)(1), the owner or operator shall install, calibrate, maintain, and operate a CEMS for measuring NO_x concentrations and shall record the output of the CEMS.
 - d. Per 40 CFR §60.47b and §60.48b, the owner or operator may use SO₂, NO_x, O₂, and CO₂ CEMS installed and certified for 40 CFR Part 75 – *Continuous Emission Monitoring* [§75.1 - §75.75] to meet the requirements of NSPS Subpart Db provided the conditions in 40 CFR §60.47b, §60.48b, and §60.49b are met.
2. Non-NSPS SO₂, NO_x, and CO Emission Standards Monitoring Requirements:
 - a. The owner or operator shall demonstrate compliance with the non-NSPS SO₂, and NO_x emission standards in this permit through the use of CEMS as required by NSPS Subpart Db.
 - b. The owner or operator shall continuously monitor emissions of carbon monoxide (CO) discharged to the atmosphere through EP-121. Therefore, the owner or operator shall install, calibrate, maintain, and operate a CEMS for measuring CO concentrations and shall record the output of the CEMS.
 3. Requirements for the Continuous Emission Monitoring Systems (CEMS) and the Continuous Opacity Monitoring System (COMS) in this Permit:
 - a. The CEMS required by this permit to monitor emissions of SO₂ and NO_x discharged to the atmosphere through EP-121 shall be designed to meet the requirements in 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2) – *Specifications and Test Procedures for SO₂ and NO_x Continuous Emission Monitoring Systems in Stationary Sources* and Performance Specification 6 (PS6) – *Specifications and Test Procedures for Continuous Emission Rate Monitoring Systems in Stationary Sources*.
 - b. The CEMS required by this permit to monitor emissions of CO discharged to the atmosphere through EP-121 shall be designed to meet the requirements in 40 CFR Part 60, Appendix B, Performance Specification 4 (PS4) – *Specifications and Test Procedures for Carbon Monoxide Continuous Emission Monitoring Systems in Stationary Sources* and Performance Specification 6 (PS6) - *Specifications and Test Procedures for Continuous Emission Rate Monitoring Systems in Stationary Sources*.
 - c. All CEMS required by this permit shall comply with the applicable requirements in Appendix F to 40 CFR Part 60 – *Quality Assurance Procedures*, including, but not limited to the following requirements:
 - I. The owner or operator shall develop and implement a quality control (QC) program. As a minimum, each QC program shall include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:
 - i. Calibration of the CEMS;
 - ii. Calibration drift determination and adjustment of the CEMS;
 - iii. Preventive maintenance of the CEMS (including spare parts inventory);
 - iv. Data recording, calculations, and reporting;
 - v. Accuracy audit procedures including sampling and analysis methods; and
 - vi. Program of corrective action for malfunctioning CEMS.

- II. Whenever excessive inaccuracies occur for two consecutive quarters, the owner or operator shall revise the current written procedures or shall modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.
 - III. The owner or operator shall keep on-site a copy of these written procedures and shall make them available for inspection by the Department.
 - IV. The owner or operator shall conduct a Relative Accuracy Test Audit (RATA) at least once every four calendar quarters and shall submit RATA reports to the Department as indicated in this permit (see Permit Condition 8 – *Notification, Reporting, and Recordkeeping*).
- d. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.
 - e. If requested by the Department, the owner or 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.
 - f. The COMS required by this permit to monitor the opacity of emissions discharged to the atmosphere through EP-121 shall be designed to meet the requirements in 40 CFR Part 60, Appendix B, Performance Specification 1 (PS1) – *Specifications and Test Procedures for Continuous Opacity Monitoring Systems in Stationary Sources*. When operating the COMS, the following must be considered:
 - I. If opacity interference due to water droplets exists in the stack, the opacity is monitored upstream of the interference.
 - II. If opacity interference is experienced at all locations, alternate parameters indicative of the particulate matter control system’s performance are monitored (subject to the approval of the Administrator).
4. Operation and Data Handling Requirements for the CEMS in this Permit:
- a. All CEMS required by this permit shall be operated and data recorded during all periods of operation of the emission unit associated with EP-121, except for CEMS breakdowns and repairs. Data is recorded during calibration checks and zero span adjustments.
 - I. The 1-hour average SO₂, NO_x, and CO emission rates measured by the CEMS required by this permit shall be used to demonstrate compliance with the emission standards in this permit. At least two data points must be used to calculate each 1-hour average.
 - II. For each hour of missing emission data for SO₂, NO_x, and CO, the owner or operator shall substitute data as follows:
 - i. If the monitor data availability is equal to or greater than 95.0%, the owner or operator shall substitute data by means of the automated data acquisition and handling system for each hour of missing data period according to the following procedures:
 - 1. For a missing data period less than or equal to 24 hours, substitute the average of the hourly concentrations recorded by the CEMS for the hour before and the hour after the missing data period.
 - 2. For a missing data period greater than 24 hours, substitute the greater of:
 - The 90th percentile hourly pollutant concentration recorded

by the CEMS during the previous 720 quality-assured monitor operating hours; or

- The average of the hourly pollutant concentrations recorded by the CEMS for the hour before and the hour after the missing data period.

ii. If the monitor data availability is at least 90.0%, the owner or operator shall substitute data by means of the automated data acquisition and handling system for each hour of missing data period according to the following procedures:

1. For a missing data period of less than or equal to 8 hours, substitute the average of the hourly concentrations recorded by the CEMS for the hour before and the hour after the missing data period.
2. For a missing data period of more than 8 hours, substitute the greater of:
 - The 95th percentile hourly pollutant concentration recorded by the CEMS during the previous 720 quality-assured monitor operating hours; or
 - The average of the hourly pollutant concentrations recorded by the CEMS for the hour before and the hour after the missing data period.

iii. If the monitor data availability is less than 90.0%, the owner or operator shall obtain actual emission data by an alternate testing or monitoring method approved by the Department.

Authority for Requirement: Iowa DNR Construction Permit 06-A-518P-S2
567 IAC 23.1(2)"ccc"

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

Authority for Requirement: 567 IAC 22.108(3)

**Compliance Assurance Monitoring Plan
CAM Plan for EP 121; Baghouse (CE 121D)**

I. Background

A. Emissions Units

Description: CFB Boiler
 Identification: 121Coal
 Facility: Roquette America, Inc.
 1417 Exchange Street
 Keokuk, IA 52632

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Iowa DNR Construction Permit 06-A-518-P1
 Particulate emission limit: PM: 29.88 lb/hr; limits set forth in 40 CFR 60 Subpart Db and 40 CFR 63 Subpart DDDDD
 PM₁₀: 29.88 lb/hr
 Lead: 0.124 lb/hr
 Opacity emission limit: 20%
 Current Monitoring requirements: Fuel consumption and sulfur content; recordkeeping specified in 40 CFR 60 Subpart A and Db; recordkeeping specified in 40 CFR 63 Subpart A and DDDDD. Continuous emission monitoring for opacity, SO₂, CO, NO_x.

C. Control Technology: Baghouse

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table 1.

Note: An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion is a deviation that must be reported in the Semi-Annual Monitoring Report and Annual Compliance Certification Report.

Table 1. Monitoring Approach

| | |
|---------------------------|--|
| General Criteria | |
| I. Indicator | Particulate emissions |
| Measurement Approach | Particulate emissions will be measured by a PM Continuous Parameter Monitoring System (PM CPMS). |
| II. Indicator Range | Not applicable. |
| III. Performance Criteria | |

| | |
|---------------------------------------|--|
| A. Data Representativeness | A PM CPMS will directly measure particulate emissions. |
| B. Verification of Operational Status | Records of particulate emission monitor results will be maintained for five years. |
| C. QA/QC Practices and Criteria | The QA/QC of the monitoring data will be as prescribed in 40 CFR 63 Subpart DDDDD. The baghouse will be maintained taking into account the manufacturer's recommendations. |
| D. Monitoring Frequency | The CPMS will be installed per requirements in the 40 CFR 63 Subpart DDDDD. |
| E. Data Collection Procedures | Electronic or hard copy of CPMS readings will be available upon request. |
| IV. Justification | A PM CPMS will give accurate data with which to compare to compliance limits. |

Emission Point ID Number: 122**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---|-----------------------|----------------------------|
| 122 | Crusher #1 | 122: Bag Filter | Coal, Pet Coke, Ag By-Products, Biomass, Untreated Waste Lumber, Waste Paper Products, Tire Derived Fuel, Limestone | 150 tons/hr. | 06-A-519-S2 |
| 122a | Receiving Hopper #1 | | | 150 tons/hr. | |
| 122b | Receiving Conveyor #1 | | | 150 tons/hr. | |
| 122c | Receiving Bucket Conveyor #1 | | | 150 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(s): 20%

Authority for Requirement: Iowa DNR Construction Permit 06-A-519-S2
567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: PM₁₀

Emission Limit(s): 1.29 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 06-A-519-S2

Pollutant: Particulate Matter

Emission Limit(s): 1.29 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 06-A-519-S2
567 IAC 23.3(2)"a"

Operational Limits & Requirements

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

NSPS:

These emission units are subject to Subparts A (General Provisions, 40 CFR §60.1 – 40 CFR §60.19) and Y (Standards of Performance for Coal Preparation Plants, 40 CFR §60.250 – 40 CFR §60.254) of the New Source Performance Standards (NSPS).

Authority for Requirement: Iowa DNR Construction Permit 06-A-519-S2
567 IAC 23.1(2)"v"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 20
- Stack Opening, (inches, dia.): 36
- Exhaust Flow Rate (scfm): 30,000
- Exhaust Temperature (°F): 70
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: Iowa DNR Construction Permit 06-A-519-S2

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

Monitoring Requirements

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

Opacity:

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

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 123**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---|-----------------------|----------------------------|
| 123 | Crusher #2 | CE 123: Bag Filter | Coal, Pet Coke, Ag By-Products, Biomass, Untreated Waste Lumber, Waste Paper Products, Tire Derived Fuel, Limestone | 150 tons/hr. | 06-A-520-S2 |
| 123a | Receiving Hopper #2 | | | 150 tons/hr. | |
| 123b | Receiving Conveyor #2 | | | 150 tons/hr. | |
| 123c | Receiving Bucket Conveyor #2 | | | 150 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(s): 20%

Authority for Requirement: Iowa DNR Construction Permit 06-A-520-S2
567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: PM₁₀

Emission Limit(s): 1.29 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 06-A-520-S2

Pollutant: Particulate Matter

Emission Limit(s): 1.29 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 06-A-520-S2
567 IAC 23.3(2)"a"

Operational Limits & Requirements

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

NSPS:

These emission units are subject to Subparts A (General Provisions, 40 CFR §60.1 – 40 CFR §60.19) and Y (Standards of Performance for Coal Preparation Plants, 40 CFR §60.250 – 40 CFR §60.254) of the New Source Performance Standards (NSPS).

Authority for Requirement: Iowa DNR Construction Permit 06-A-520-S2
567 IAC 23.1(2)"v"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 20
- Stack Opening, (inches, dia.): 36
- Exhaust Flow Rate (scfm): 30,000
- Exhaust Temperature (°F): 70
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: Iowa DNR Construction Permit 06-A-520-S2

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

Monitoring Requirements

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

Opacity:

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

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 125 & 125B

Associated Equipment

| Emission Point | Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------|---------------|---------------------------|-------------------|--------------|---|---------------------|
| 125 | 125 | Limestone Storage Silo #1 | 125: Bag Filter | Limestone | 150 tons/hr. (mechanical transfer) 16.67 tons/hr. (pneumatic transfer) | 06-A-522-S2 |
| 125B | 125B | Limestone Storage Silo #2 | 125B: Bag Filter | Limestone | 150 tons/hr. (mechanical transfer) 16.67 tons/hr. (pneumatic transfer) | 07-A-1560-S1 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): No Visible Emissions

Authority for Requirement: Iowa DNR Construction Permits 06-A-522-S2 & 07-A-1560-S1
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 0.17 lb./hr.

Authority for Requirement: Iowa DNR Construction Permits 06-A-522-S2 & 07-A-1560-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.17 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permits 06-A-522-S2 & 07-A-1560-S1
567 IAC 23.3(2)"a"

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 90
- Stack Opening, (inches): 10 x 8
- Exhaust Flow Rate (scfm): 3,500
- Exhaust Temperature (°F): 70
- Discharge Style: Downward
- Authority for Requirement: Iowa DNR Construction Permits 06-A-522-S2 & 07-A-1560-S1

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

Monitoring Requirements

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

Opacity:

Visible emissions shall be observed on a weekly basis to ensure none occur when the emission unit on this emission point is at or near full capacity. If visible emissions are 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 visible emissions readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

Authority for Requirement: 567 IAC 22.108(3)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No
(Required for 125 & 125B)

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 126, 126B, 126C, 126D

Associated Equipment

| Emission Point | Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|-----------------------|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| 126 | 126 | Ash Silo Conveying System | 126: Bag Filter | Coal Ash | 50 tons/hr. | 06-A-523-S2 |
| 126B | 126B | Ash Silo Conveying System | 126B: Bag Filter | Coal Ash | 50 tons/hr. | 07-A-1561-S1 |
| 126C | 126C | Ash Silo Conveying System | 126C: Bag Filter | Coal Ash | 50 tons/hr. | 07-A-1562-S1 |
| 126D | 126D | Ash Silo Conveying System | 126D: Bag Filter | Coal Ash | 50 tons/hr. | 07-A-1563-S1 |

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): No Visible Emissions

Authority for Requirement: Iowa DNR Construction Permits 06-A-523-S2, 07-A-1561-S1,
07-A-1562-S1, 07-A-1563-S1
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 0.15 lb./hr.

Authority for Requirement: Iowa DNR Construction Permits 06-A-523-S2, 07-A-1561-S1,
07-A-1562-S1, 07-A-1563-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.15 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permits 06-A-523-S2, 07-A-1561-S1,
07-A-1562-S1, 07-A-1563-S1
567 IAC 23.3(2)"a"

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 13
Stack Opening, (inches, dia.): 10
Exhaust Flow Rate (scfm): 1,600
Exhaust Temperature (°F): 165
Discharge Style: Horizontal
Authority for Requirement: Iowa DNR Construction Permits 06-A-523-S2, 07-A-1561-S1,
07-A-1562-S1, 07-A-1563-S1

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

Monitoring Requirements

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

Opacity:

Visible emissions shall be observed on a weekly basis to ensure none occur when the emission unit on this emission point is at or near full capacity. If visible emissions are 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 visible emissions readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

Authority for Requirement: 567 IAC 22.108(3)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No
(Required for 126, 126B, 126C, & 126D)

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 127**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| 127 | Ash Silo Bin Vent | 127: Bag Filter | Coal Ash | 50 tons/hr. | 06-A-524-S1 |

Applicable Requirements**Emission Limits (lb./hr., gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): No Visible Emissions

Authority for Requirement: Iowa DNR Construction Permit 06-A-524-S1
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 0.14 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 06-A-524-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.14 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 06-A-524-S1
567 IAC 23.3(2)"a"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 149

Stack Opening, (inches): 8 x 14

Exhaust Flow Rate (scfm): 1,700

Exhaust Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 06-A-524-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity:

Visible emissions shall be observed on a weekly basis to ensure none occur when the emission unit on this emission point is at or near full capacity. If visible emissions are 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 visible emissions readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

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

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 129**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---|-----------------------|----------------------------|
| 129 | Belt Conveyor | 129: Bag Filter | Coal, Pet Coke, Ag By-Products, Biomass, Untreated Waste Lumber, Waste Paper Products, Tire Derived Fuel, Limestone | 150 tons/hr. | 06-A-526-S2 |

Applicable Requirements**Emission Limits (lb./hr., gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 20%

Authority for Requirement: Iowa DNR Construction Permit 06-A-526-S2
567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: PM₁₀

Emission Limit(s): 0.52 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 06-A-526-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.52 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 06-A-526-S2
567 IAC 23.3(2)"a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS:

These emission units are subject to Subparts A (General Provisions, 40 CFR §60.1 – 40 CFR §60.19) and Y (Standards of Performance for Coal Preparation Plants, 40 CFR §60.250 – 40 CFR §60.254) of the New Source Performance Standards (NSPS).

Authority for Requirement: Iowa DNR Construction Permit 06-A-520-S2
567 IAC 23.1(2)"v"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 75
- Stack Opening, (inches, dia.): 18
- Exhaust Flow Rate (scfm): 3,100
- Exhaust Temperature (°F): 70
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: Iowa DNR Construction Permit 06-526-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity:

Visible emissions shall be observed on a weekly basis to ensure there are none when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>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 observation of the violation.

If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

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

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 131, 132, 133

Associated Equipment

| Emission Point | Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------|---------------|---------------------------|-------------------|---|----------------|---------------------|
| 131 | 131 | Bunker #1 | 131: Bag Filter | Coal, Pet Coke, Ag By-Products, Biomass, | 150 tons/hr. | 06-A-528-S2 |
| 132 | 132 | Bunker #2 | 132: Bag Filter | Untreated Waste Lumber, Waste Paper Products, | 150 tons/hr. | 06-A-529-S2 |
| 133 | 133 | Bunker #3 | 133: Bag Filter | Tire Derived Fuel, Limestone | 150 tons/hr. | 06-A-530-S2 |

Applicable Requirements

Emission Limits (lb./hr., gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 20%

Authority for Requirement: Iowa DNR Construction Permits 06-A-528-S2, 06-A-529-S2, 06-A-530-S2
567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: PM₁₀

Emission Limit(s): 0.03 lb./hr.

Authority for Requirement: Iowa DNR Construction Permits 06-A-528-S2, 06-A-529-S2, 06-A-530-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.03 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permits 06-A-528-S2, 06-A-529-S2, 06-A-530-S2
567 IAC 23.3(2)"a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS:

These emission units are subject to Subparts A (General Provisions, 40 CFR §60.1 – 40 CFR §60.19) and Y (Standards of Performance for Coal Preparation Plants, 40 CFR §60.250 – 40 CFR §60.254) of the New Source Performance Standards (NSPS).

Authority for Requirement: Iowa DNR Construction Permits 06-A-528-S2, 06-A-529-S2, 06-A-530-S2
567 IAC 23.1(2)"v"

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 145

Stack Opening, (inches, dia.): 4

Exhaust Flow Rate (scfm): 70

Exhaust Temperature (°F): 300

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permits 06-A-528-S2, 06-A-529-S2, 06-A-530-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity:

Visible emissions shall be observed on a weekly basis to ensure there are none when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>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 observation of the violation.

If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

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

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 135**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---|-----------------------|----------------------------|
| 135 | Drag Feed Conveyor | 135: Bag Filter | Coal, Pet Coke, Ag By-Products, Biomass, Untreated Waste Lumber, Waste Paper Products, Tire Derived Fuel, Limestone | 150 tons/hr. | 06-A-532-S2 |
| 135B | Limestone Conveyor Receiving | | Limestone | 150 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(s): 20%

Authority for Requirement: Iowa DNR Construction Permit 06-A-532-S2
567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: PM₁₀

Emission Limit(s): 0.17 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 06-A-532-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.17 lb./hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 06-A-532-S2
567 IAC 23.3(2)"a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS:

These emission units are subject to Subparts A (General Provisions, 40 CFR §60.1 – 40 CFR §60.19) and Y (Standards of Performance for Coal Preparation Plants, 40 CFR §60.250 – 40 CFR §60.254) of the New Source Performance Standards (NSPS).

Authority for Requirement: Iowa DNR Construction Permit 06-A-532-S2
567 IAC 23.1(2)"v"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 170
- Stack Opening, (inches.): 15 x 18
- Exhaust Flow Rate (scfm): 2,000
- Exhaust Temperature (°F): 70
- Discharge Style: Horizontal
- Authority for Requirement: Iowa DNR Construction Permit 06-A-532-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity:

Visible emissions shall be observed on a weekly basis to ensure there are none when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>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 observation of the violation.

If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

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

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 200-1**Associated Equipment**

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| CG-3 | Dew Point Heater | Natural Gas | 1.57 MMBtu/hr. | 02-A-694P-S1 |

Applicable Requirements**Emission Limits (lb./hr., gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 02-A-694P-S1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 0.012 lb./hr., 0.052 tons/yr., 0.008 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permit 02-A-694P-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.012 lb./hr., 0.052 tons/yr., 0.008 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permit 02-A-694P-S1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppm

Authority for Requirement: Iowa DNR Construction Permit 02-A-694P-S1
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 0.24 lb./hr., 1.1 tons/yr., 0.15 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permit 02-A-694P-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

- 1. This heater shall be fired by natural gas only.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- 1. Record the amount of natural gas used in the heater on an annual basis.

Authority for Requirement: Iowa DNR Construction Permit 02-A-694P-S1

NESHAP:

See "Plant Wide Condition" regarding 40 CFR 63 Subpart DDDDD – National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, and Institutional Boilers and Process Heaters.

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 40.75

Stack Opening, (inches, dia.): 13.5

Exhaust Flow Rate (acfm): 893

Exhaust Temperature (°F): 798

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 02-A-694P-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 201-1

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| CG-4 | Diesel Starting Engine | Diesel Fuel | 710 hp | 02-A-695P-S3 |

Applicable Requirements

Emission Limits (lb./hr., gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

BACT Limits:

Pollutant: Opacity

Emission Limit(s): 5%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 02-A-695P-S3

⁽¹⁾ Standard is expressed as a six (6) minute average and applies only during normal operation. A standard of 20% opacity applies during times of startup, shutdown, and malfunction (SSM).

Pollutant: PM₁₀

Emission Limit(s): 0.11 tons/yr., 0.069 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permit 02-A-695P-S3

Pollutant: Particulate Matter

Emission Limit(s): 0.011 tons/yr., 0.069 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permit 02-A-695P-S3

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 0.49 tons/yr., 3.1 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permit 02-A-695P-S3

Other Limits:

Pollutant: PM₁₀

Emission Limit(s): 0.37 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 02-A-695P-S3

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permit 02-A-695P-S3
567 IAC 23.3(3)"d"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 16.5 lb./hr., 0.49 tons/yr., 3.1 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permit 02-A-695P-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Hours of operation:

1. This engine shall be operated no more than fifty-nine (59) hours per twelve (12) month rolling period. This engine shall be operated no more than fifty (50) hours per twelve (12) month rolling period until the exhaust stack has been raised to fifty (50) feet and made an unobstructed vertical discharge.
2. This engine shall be operated no more than three (3) hours per day. This engine shall be operated no more than one (1) hour per day until the exhaust stack has been raised to fifty (50) feet high and made an unobstructed vertical discharge.

Process throughput:

1. This engine shall be fired on either #1 or #2 fuel oil.
2. The sulfur (S) content of any fuel used this engine shall not exceed 0.5% by weight.
3. This engine shall be operated according to the manufacturer's specifications in order to minimize emissions.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. Record the number of hours the engine is operated. Calculate and record the monthly and the twelve (12) month rolling totals.
2. Record the times during the day that the engine is operated.
3. Record the sulfur (S) content of any fuel used in the engine, in weight percent.
4. Submit the notification required per 40 CFR §63.6645(d).

Authority for Requirement: Iowa DNR Construction Permit 02-A-695P-S3

NESHAP:

This limited use engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(i) this limited use engine, located at a major source, is a new stationary RICE as it was constructed on or after December 19, 2002.

According to 40 CFR 63.6590(b)(1)(ii), a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is not subject to the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A except for initial notification requirements of 40 CFR 63.6645(f).

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 50
- Stack Opening, (inches, dia.): 8
- Exhaust Flow Rate (scfm): 4,880
- Exhaust Temperature (°F): 830
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: Iowa DNR Construction Permit 02-A-695P-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- Agency Approved Operation & Maintenance Plan Required?** Yes No
- Facility Maintained Operation & Maintenance Plan Required?** Yes No
- Compliance Assurance Monitoring (CAM) Plan Required?** Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 201-2**Associated Equipment**

| Emission Unit | Emission Unit Description | Monitoring Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|-----------------------------|---------------------|--------------------------|----------------------------|
| CG-2 | Combustion Turbine, Simple Cycle | ME CG-2: NO _x | Natural Gas | 587 MMBtu/hr. 41.5 MW | 02-A-693P-S1 |

Applicable Requirements**Emission Limits (lb./hr., gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 02-A-693P-S1
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 11.7 lb./hr., 4.8 tons/yr., 0.02 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permit 02-A-693P-S1

Pollutant: Particulate Matter

Emission Limit(s): 11.7 lb./hr., 4.8 tons/yr., 0.02 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permit 02-A-693P-S1

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 3.5 lb./hr., 1.53 tons/yr., 0.015% by volume⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 02-A-693P-S1
567 IAC 23.1(2)"aa"
40 CFR 60 Subpart GG

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 34.6 lb./hr., 14.4 tons/yr., 0.06 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permit 02-A-693P-S1

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 0.0075% by volume⁽²⁾

Authority for Requirement: 40 CFR 60 Subpart GG
567 IAC 23.1(2)"aa"

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 33.3 lb./hr., 14.6 tons/yr.

Authority for Requirement: Iowa DNR Construction Permit 02-A-693P-S1

⁽²⁾ at 15% oxygen on a dry basis (NSPS GG)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Hours of operation:

1. This turbine shall be operated on simple cycle mode for a maximum of 876 hours per 12-month rolling period.

Process throughput:

1. This turbine shall be fired by natural gas only.
2. The sulfur content of any fuel used in this turbine shall not exceed 0.8% by weight as required by NSPS subpart GG.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. See NSPS section below.
2. Record the amount of natural gas used in this turbine on an annual basis.
3. Record the number of hours this turbine is operated in simple cycle mode. Calculate and record monthly and 12-month rolling totals.

Authority for Requirement: Iowa DNR Construction Permit 02-A-693P-S1

567 IAC 23.1(2)"aa"

40 CFR 60 Subpart GG

NSPS:

40 CFR 60.334(h)⁽³⁾

(2) Shall monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen (*i.e.*, if an F-value greater than zero is being or will be used by the owner or operator to calculate STD in §60.332). The nitrogen content of the fuel shall be determined using methods described in § 60.335(b)(9) or an approved alternative.⁽⁴⁾

(3) Notwithstanding the provisions of paragraph (h)(1) of this section, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in § 60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:

- (i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or

(ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

⁽³⁾ The following language was taken from construction permit 02-A-693P-S1 "The sulfur and nitrogen content of the fuel used in this unit shall be determined and recorded daily or on any other schedule approved by USEPA prior to the use of that schedule. (This requirement comes from 40 CFR 60.334"b"(2))." This requirement was based on the previous version of the 40 CFR 60 Subpart GG. This section states the current requirements from this subpart.

⁽⁴⁾ The facility does not claim an allowance for fuel bound nitrogen, so no monitoring is required.

Authority for Requirement: 567 IAC 23.1(2)"aa"
40 CFR 60 Subpart GG

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 120

Stack Opening, (inches, dia.): 108

Exhaust Flow Rate (acfm): 787,308

Exhaust Temperature (°F): 1,015

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 02-A-693P-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity:

Visible emissions shall be observed on a weekly basis to ensure there are none when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from observation of the violation.

If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirement: 567 IAC 22.108(3)

Continuous Emissions Monitoring:

Compliance with the nitrogen oxide emission limit of this permit shall be continuously demonstrated by the owner/operator through the use of a CEMS. Therefore, a CEMS shall be installed, calibrated, maintained, and operated for measuring nitrogen oxides emissions in units of the standards discharged to the atmosphere from this unit and the output of the system shall be recorded. The system shall be designed to meet the 40 CFR 75, Appendix A, and Appendix C requirements. The specifications of 40 CFR 75 Appendix B (Quality Assurance/Quality Control) shall apply. 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.

Missing data for nitrogen oxides shall be treated according to 40 CFR 75 Appendix C (2).

Authority for Requirement: Iowa DNR Construction Permit 02-A-693P-S1

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 201-5, 201-6, 201-8

Associated Equipment

| Emission Point | Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|-----------------------|----------------------|----------------------------------|-----------------------------------|---------------------|-----------------------|----------------------------|
| 201-5 | 201-5 | Package Boiler | 201-5; Low NO _x Burner | Natural Gas | 96.66 MMBtu/hr. | 12-A-200-S2 |
| 201-6 | 201-6 | Package Boiler | 201-6; Low NO _x Burner | Natural Gas | 96.66 MMBtu/hr. | 12-A-201-S2 |
| 201-8 | 201-8 | Package Boiler | 201-8; Low NO _x Burner | Natural Gas | 96.66 MMBtu/hr. | 12-A-202-S2 |

Applicable Requirements

Emission Limits (lb./hr., gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permits 12-A-200-S2, 12-A-201-S2, 12-A-202-S2
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions (No VE)" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.50 lb./hr., 0.6 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permits 12-A-200-S2, 12-A-201-S2, 12-A-202-S2
567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppm

Authority for Requirement: Iowa DNR Construction Permits 12-A-200-S2, 12-A-201-S2, 12-A-202-S2
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 14.65 lb./hr.

Authority for Requirement: Iowa DNR Construction Permits 12-A-200-S2, 12-A-201-S2, 12-A-202-S2

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 7.25 lb/hr.

Authority for Requirement: Iowa DNR Construction Permits 12-A-200-S2, 12-A-201-S2, 12-A-202-S2

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. Natural Gas Boilers (EU 201-5, 201-6, 201-7) shall only use natural gas as fuel.
2. The owner or operator shall comply with the applicable requirements in 40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [§60.40c - §60.48c].

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The owner or operator shall comply with the reporting and recordkeeping requirements as outlined in 40 CFR §60.48c, including, but not limited to the following:
 - a. Per 40 CFR §60.48c(g)(1), the owner or operator shall record and maintain records of the amount of each fuel combusted during each operating day; or
 - b. Per 40 CFR §60.48c(g)(2), record and maintain records of the amount of each fuel combusted during each calendar month; or
 - c. Per 40 CFR §60.48c(g)(3), record and maintain records of the total amount of each steam generating unit fuel delivered to the property during each calendar month.

Authority for Requirement: Iowa DNR Construction Permits 12-A-200-S2, 12-A-201-S2, 12-A-202-S2
567 IAC 23.1(2)"III"
40 CFR 60 Subpart Dc

NESHAP:

See "Plant Wide Condition" regarding 40 CFR 63 Subpart DDDDD – National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, and Institutional Boilers and Process Heaters.

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

| Emission Point | 201-5 | 201-6 | 201-8 |
|---|-----------------------|-----------------------|-----------------------|
| Stack Height, (ft., from the ground) | 34.33 | 34.33 | 34.33 |
| Stack Opening, (inches) | 48 (dia.) | 49.5 (dia.) | 48 |
| Exhaust Flow Rate (scfm) | 25,280 | 27,021 | 26,762 |
| Exhaust Temperature (°F) | 510 | 510 | 510 |
| Discharge Style | Vertical Unobstructed | Vertical Unobstructed | Vertical Unobstructed |
| Authority for Requirement | 12-A-200-S2 | 12-A-201-S2 | 12-A-202-S2 |

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

- Pollutant – Nitrogen Oxides (NO_x)⁽³⁾
- Stack Test to be Completed by – 9/26/2018
- Test Method – 40 CFR 60, Appendix A, Method 7E
- Authority for Requirement – 567 IAC 22.108(3)"b"

⁽³⁾ Each emission point qualifies for one stack test. The facility may choose to complete the testing on one emission point to demonstrate compliance for all three boilers. If the representative testing shows the selected boiler does not demonstrate compliance, all three boilers will be considered to be out of compliance with the emission limit.

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 202-1**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Monitoring Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|--|---|-----------------------------|---------------------|--------------------------|----------------------------|
| 202-1 | Combustion Turbine/Duct Burner, Combined Cycle | CG-1A: SCR CG-1B: Oxidation Catalyst | MECG-1: NO _x | Natural Gas | 674 MMBtu/hr. 41.5 MW | 02-A-692P-S1 |

Applicable Requirements**Emission Limits (lb./hr., gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 02-A-692P-S1
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 15.0 lb./hr., 54.0 tons/yr., 0.02 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permit 02-A-692P-S1

Pollutant: Particulate Matter

Emission Limit(s): 15.0 lb./hr., 54.0 tons/yr., 0.02 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permit 02-A-692P-S1

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 4.52 lb./hr., 17.5 tons/yr., 0.015% by volume⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 02-A-692P-S1
567 IAC 23.1(2)"aa"
40 CFR 60 Subpart GG

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 9.12 lb./hr., 32.4 tons/yr., 0.012 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permit 02-A-692P-S1

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 0.0075% by volume⁽²⁾

Authority for Requirement: 40 CFR 60 Subpart GG
567 IAC 23.1(2)"aa"

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 5.0 lb./hr., 21.9 tons/yr.

Authority for Requirement: Iowa DNR Construction Permit 02-A-692P-S1

⁽²⁾ at 15% oxygen on a dry basis (NSPS GG)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. This turbine shall be fired by natural gas only.
2. The sulfur content of any fuel used in this turbine shall not exceed 0.8% by weight as required by

Control equipment parameters:

1. The emissions from this turbine shall be controlled by the SCR and oxidative catalyst whenever this turbine is operated in combined cycle mode.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. See NSPS section below.
2. Record the amount of natural gas used in this turbine on an annual basis.
3. Authority for Requirement: Iowa DNR Construction Permit 02-A-692P-S1
567 IAC 23.1(2)"aa"
40 CFR 60 Subpart GG

NSPS:

The Duct Burner associated with this emission point is subject to NSPS for Industrial-Commercial-Institutional Steam Generating Units 40 CFR 60 Subpart Db.

Authority for Requirement: 567 IAC 23.1(2)"ccc"

40 CFR 60.334(h)⁽³⁾

(2) Shall monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen (*i.e.*, if an F-value greater than zero is being or will be used by the owner or operator to calculate STD in §60.332). The nitrogen content of the fuel shall be determined using methods described in § 60.335(b)(9) or an approved alternative.⁽⁴⁾

(3) Notwithstanding the provisions of paragraph (h)(1) of this section, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in § 60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:

- (i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or

(ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

⁽³⁾ The following language was taken from construction permit 02-A-692P-S1 "The sulfur and nitrogen content of the fuel used in this unit shall be determined and recorded daily or on any other schedule approved by USEPA prior to the use of that schedule. (This requirement comes from 40 CFR 60.334"b"(2))." This requirement was based on the previous version of the 40 CFR 60 Subpart GG. This section states the current requirements from this subpart.

⁽⁴⁾ The facility does not claim an allowance for fuel bound nitrogen, so no monitoring is required.

Authority for Requirement: 567 IAC 23.1(2)"aa"
40 CFR 60 Subpart GG

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 170

Stack Opening, (inches, dia.): 144

Exhaust Flow Rate (scfm): 392,880

Exhaust Temperature (°F): 273

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 02-A-692P-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity:

Visible emissions shall be observed on a weekly basis to ensure there are none when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from observation of the violation.

If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirement: 567 IAC 22.108(3)

Stack Testing:

Pollutant – PM₁₀

Stack Test to be Completed by – 9/26/2018

Test Method – 40 CFR 51, Appendix M 201A w/ 202

Authority for Requirement – 567 IAC 22.108(3)"b"

Pollutant – Particulate Matter

Stack Test to be Completed by – 9/26/2018

Test Method – 40 CFR 60 Appendix A Method 5, 40 CFR 51 Appendix M Method 202

Authority for Requirement – 567 IAC 22.108(3)"b"

Continuous Emissions Monitoring:

Compliance with the nitrogen oxide emission limit of this permit shall be continuously demonstrated by the owner/operator through the use of a CEMS. Therefore, a CEMS shall be installed, calibrated, maintained, and operated for measuring nitrogen oxides emissions in units of the standards discharged to the atmosphere from this unit and the output of the system shall be recorded. The system shall be designed to meet the 40 CFR 75, Appendix A, and Appendix C requirements. The specifications of 40 CFR 75 Appendix B (Quality Assurance/Quality Control) shall apply. 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.

Missing data for nitrogen oxides shall be treated according to 40 CFR 75 Appendix C (2).

Authority for Requirement: Iowa DNR Construction Permit 02-A-692P-S1

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
(Required for CO)

Authority for Requirement: 567 IAC 22.108(3)

**Compliance Assurance Monitoring Plan
CAM Plan for CG-1B Oxidation Catalyst**

I. Background

A. Emissions Units

Description: Combustion Turbine with Duct Burner – Combined Cycle
 Identification: CG-1
 Facility: Roquette America, Inc.
 1417 Exchange Street
 Keokuk, IA 52632

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Iowa DNR Construction Permit 02-A-692P-S1
 Carbon Monoxide emission limit: 5.0 lb/hr, 21.9 tpy
 Current Monitoring requirements: Recordkeeping of fuel usage

C. Control Technology Oxidation Catalyst

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table 1. The selected performance indicator is control device operating temperature.

Note: An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion is a deviation that must be reported in the Semi-Annual Monitoring Report and Annual Compliance Certification Report.

Table 1. Monitoring Approach

| General Criteria | |
|---------------------------|---|
| I. Indicator | Catalyst inlet gas stream temperature. (Current DCS Indicator TTHB85) |
| Measurement Approach | Inlet gas temperature is measured by securing inlet probe prior to the air stream entering the catalytic bed. Analytical devices required are thermocouples as appropriate for specific gas stream. |
| II. Indicator Range | Catalyst inlet gas temperature will be checked daily when operating to ensure that the temperature is in the range of 500°F to 1050°F during operation of the unit, except during periods of startup, shutdown, or cleaning of control equipment. |
| QIP Threshold | The QIP threshold is six excursions in a six month period. |
| III. Performance Criteria | |

| | |
|---------------------------------------|---|
| A. Data Representativeness | The oxidizer is designed to operate at maximum control efficiency above a specific inlet gas temperature. If the temperature drifts below the optimal efficiency range, this is an indication of the potential for increased CO emissions |
| B. Verification of Operational Status | Collected temperature readings will be maintained on site and available for inspection for a period of five years. |
| C. QA/QC Practices and Criteria | Recording devices will be calibrated and maintained using procedures that take into account manufacturer's specifications. Oxidizer will be maintained as outlined in the facility's operation and maintenance plan. |
| D. Monitoring Frequency | Recorded continuously on strip chart or data acquisition system. Monitored daily for temperatures below indicator range. If temperature falls below indicator range specified above, corrective action shall be taken as soon as possible, but no later than eight hours from observation. |
| E. Data Collection Procedures | Electronic or hard copy of daily temperature readings will be available upon request. Corrective actions resulting from excursions will be recorded. |
| IV. Justification | Temperature was selected as the performance indicator because it demonstrates the proper operating conditions of this control device and therefore the optimal CO control performance. |

WMD Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|----------------------------------|--|
| 11-1/3/12 | WMD-09 | WMD Exhaust Vents | NA |
| 11-13 | WMD-05 | Reclaim Starch | 98-A-374 |

Emission Point ID Number: 11-1/3/12

Associated Equipment

| Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| WMD-09 | WMD Exhaust Vents | Starch | 8 tons/hr. | NA |

Applicable Requirements

Emission Limits (lb./hr., gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7)

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 11-13

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|---------------|---------------------------|-------------------|--------------|----------------|---------------------|
| WMD-05 | Reclaim Starch | WMD-05: Baghouse | Starch Dust | 3 tons/hr. | 98-A-374 |

Applicable Requirements

Emission Limits (lb./hr., gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 98-A-374
567 IAC 23.3(2)"d"

⁽¹⁾ If visible emissions are observed other than startup, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: PM₁₀

Emission Limit(s): 0.66 lb./hr.

Authority for Requirement: Iowa DNR Construction Permit 98-A-374

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 98-A-374
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 80

Stack Opening, (feet, dia.): 2.17

Exhaust Flow Rate (scfm): 7,700

Exhaust Temperature (°F): 170

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 98-A-374

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Wastewater Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description | IDNR Construction Permit Number |
|------------------------------|-----------------------------|----------------------------------|--|
| 71-2 | WW-01 | Lime Storage Silo #1 | 89-A-053-S1 |
| 71-8 | WW-04 | #1 Aeration | NA |
| 71-9 | WW-05 | #2 Aeration | NA |
| 71-10 | WW-07 | Lime Storage Silo #2 | 09-A-282 |
| 71-11 | WW-06 | #3 Surge & Equalization | NA |

Emission Point ID Number: 71-2

Associated Equipment

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|---------------|---------------------------|-------------------|--------------|----------------|---------------------|
| WW-01 | Lime Storage Silo #1 | WW-01: Baghouse | Lime | 24 tons/hr. | 89-A-053-S1 |

Applicable Requirements

Emission Limits (lb./hr., gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 89-A-053-S1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.53 lb/hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 89-A-053-S1
567 IAC 23.3(2)"a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:

1. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 89-A-053-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft., from the ground): 1.5
- Stack Opening, (inches, dia.): 11
- Exhaust Flow Rate (scfm): NA
- Exhaust Temperature (°F): 70
- Discharge Style: Horizontal
- Authority for Requirement: Iowa DNR Construction Permit 89-A-053-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- Agency Approved Operation & Maintenance Plan Required?** Yes No
- Facility Maintained Operation & Maintenance Plan Required?** Yes No
- Compliance Assurance Monitoring (CAM) Plan Required?** Yes No

Authority for Requirement: 567 IAC 22.108(3)

**Compliance Assurance Monitoring Plan
CAM Plan for EP 71-2; Baghouse (WW-1)**

I. Background

A. Emissions Units

Description: Lime Silo
 Identification: WW-1
 Facility: Roquette America, Inc.
 1417 Exchange Street
 Keokuk, IA 52632

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: 89-A-053-S1, 567 IAC 23.3(2)d and 567 IAC 23.2(a)
 Particulate emission limit: PM: 0.53 lb/hr
 Opacity emission limit: 40%
 Current Monitoring requirements: None

C. Control Technology: Baghouse

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table 1.

Note: An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion is a deviation that must be reported in the Semi-Annual Monitoring Report and Annual Compliance Certification Report.

Table 1. Monitoring Approach

| General Criteria | |
|----------------------|--|
| I. Indicator | Visible emissions |
| Measurement Approach | Visible emissions from the control device exhaust while the emission unit is operating. |
| II. Indicator Range | No visible emissions shall be observed, except during startup, shutdown, or cleaning of the control equipment. Visible emissions require corrective action and recordkeeping requirements. |
| QIP Threshold | The QIP threshold is six excursions in a six month period. |

| | |
|---------------------------------------|---|
| III. Performance Criteria | |
| A. Data Representativeness | Visible emissions are a key indicator that a baghouse is operating properly. Visible emissions occur when material can be seen exiting a baghouse's waste stream. |
| B. Verification of Operational Status | Records of visible emission checks will be maintained for five years. |
| C. QA/QC Practices and Criteria | The observer will be trained to detect visible emissions, but will not necessarily be Method 9 certified. Baghouse will be maintained as outlined in the facility's operation and maintenance plan. |
| D. Monitoring Frequency | <p>Visible emission readings shall be conducted daily during a period when the emission unit on this emission point is in operation.</p> <p>If visible emissions are detected, corrective action shall be taken as soon as possible, but no later than eight hours from observation. If corrective action does not return observation to no visible emissions, then a Method 9 observation will be required.</p> <p>If weather conditions prevent the observer from conducting a visible emission observation, the observer shall note such conditions on observation sheet. At least three attempts shall be made to retake readings at approximately two hour intervals throughout the day. If weather prohibits all three attempts, an observation shall be made on the next operating day that weather permits.</p> |
| E. Data Collection Procedures | <p>Electronic or hard copy of daily visible emission readings will be available upon request.</p> <p>Corrective actions resulting from excursions will be recorded.</p> |
| IV. Justification | Visible emission detection was selected as the performance indicator because it demonstrates the proper operating conditions of this control device and therefore the optimal PM control performance. |

Emission Point ID Numbers: 71-8, 71-9, 71-11

Associated Equipment

| Emission Point | Emission Unit | Emission Unit Description | Raw Material | Rated Capacity | Construction Permit |
|-----------------------|----------------------|----------------------------------|---------------------|-----------------------|----------------------------|
| 71-8 | WW-04 | #1 Aeration | Wastewater | 175 mgal/hr. | NA |
| 71-9 | WW-05 | #2 Aeration | Wastewater | 175 mgal/hr. | NA |
| 71-11 | WW-06 | #3 Surge & Equalization | Wastewater | 175 mgal/hr. | NA |

Applicable Requirements

Emission Limits (lb./hr., gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

There are no applicable emission limits for these emission points at this time.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 71-10**Associated Equipment**

| Emission Unit | Emission Unit Description | Control Equipment | Raw Material | Rated Capacity | Construction Permit |
|----------------------|----------------------------------|--------------------------|---------------------|-----------------------|----------------------------|
| WW-07 | Lime Storage Silo #2 | CE WW-7: Baghouse | Lime | 0.67 tons/hr. | 09-A-282 |

Applicable Requirements**Emission Limits (lb./hr., gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): No Visible Emissions

Authority for Requirement: Iowa DNR Construction Permit 09-A-282
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 0.30 lb/hr.

Authority for Requirement: Iowa DNR Construction Permit 09-A-282

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 09-A-282
567 IAC 23.3(2)"a"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 66

Stack Opening, (dia.): 18 x 6

Exhaust Flow Rate (scfm): 3,300

Exhaust Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 09-A-282

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity:

Visible emissions shall be observed on a weekly basis to ensure none occur when the emission unit on this emission point is at or near full capacity. If visible emissions are 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 visible emissions readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

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

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

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 66219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in *567 IAC 22.105(2)*. *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all

emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108 (15)"e"

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 22.108 (5)

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The 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.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
- b. Compliance test methods specified in 567 Chapter 25; or
- c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

- a. Any monitoring or testing methods provided in these rules; or
- b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 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. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source,

including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." – See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

- a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
- b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
- c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);

- d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));.
- e. The changes comply with all applicable requirements.
- f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
 - vii. Any permit term or condition no longer applicable as a result of the change.

567 IAC 22.110(1)

- 2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*
- 3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*
- 4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*
- 5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

- a. An administrative permit amendment is a permit revision that does any of the following:
 - i. Correct typographical errors
 - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - iii. Require more frequent monitoring or reporting by the permittee; or
 - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.

a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:

- i. Do not violate any applicable requirement;
- ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
- iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
- iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
- v. Are not modifications under any provision of Title I of the Act; and
- vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B).

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

- i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- ii. The permittee's suggested draft permit;
- iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation

of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. 567 IAC 22.111-567 IAC 22.113

G19. Duty to Obtain Construction Permits

Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. 567 IAC 22.1(1)

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (567 IAC 23.1(3)"a"); training fires and controlled burning of a demolished building (567 IAC 23.2).

G21. Open Burning

The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. 567 IAC 23.2 *except* 23.2(3)"j"; 567 IAC 23.2(3)"j" - *State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7)

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

- a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
- b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
- c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
- d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting 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 not required if the permit has a remaining term of less than three years;
 - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
 - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:
 - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
 - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
 - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
 - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*
4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*
5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. *567 IAC 22.114(3)*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
 - a. Such applicable requirements are included and are specifically identified in the permit; or
 - b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
3. A permit shield shall not alter or affect the following:
 - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
 - d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of *567 IAC 22.111(1)*. *567 IAC 22.111 (1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of *567 – Chapter 23* or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
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 build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. *567 IAC 26.1(1)*

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

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:

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
Manchester, IA 52057
(563) 927-2640

Field Office 2

2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3

1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4

1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5

7900 Hickman Road, Suite #200
Windsor Heights, IA 50324
(515) 725-0268

Field Office 6

1023 West Madison Street
Washington, IA 52353-1623
(319) 653-2135

Polk County Public Works Dept.

Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health

Air Quality Branch
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000