

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

**Name of Permitted Facility: Continental Cement Company –
Davenport Plant**

**Facility Location: 301 East Front Street
Buffalo, IA 52728**

Air Quality Operating Permit Number: 04-TV-007R3

Expiration Date: 01/25/2028

Permit Renewal Application Deadline: 07/25/2027

EIQ Number: 92-3093

Facility File Number: 82-04-005

Responsible Official

Name: Brett Imsland

Title: Plant Manager

**Mailing Address: 301 E Front St.
Buffalo, IA 52728**

Phone #: (563) 328-6236

Permit Contact Person for the Facility

Name: Damion Sadd

Title: Environmental & Public Affairs Manager

**Mailing Address: 301 E Front St.
Buffalo, IA 52728**

Phone #: (563) 328-6204

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



01/26/2023

Marnie Stein, Supervisor of Air Operating Permits Section

Date

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Abbreviations

acfm	actual cubic feet per minute
CFR	Code of Federal Regulation
dscf	dry standard cubic feet
dscm	dry standard cubic meters
°F	degrees Fahrenheit
EIQ	emissions inventory questionnaire
gr./dscf	grains per dry standard cubic foot
hp./hr.	horsepower hours
IAC	Iowa Administrative Code
IDNR	Iowa Department of Natural Resources
KWH	kilowatts per hour
mg/dscm	milligrams per dry standard cubic meter
N/A	not applicable
ng/dscm	nanograms per dry standard cubic meter
NSPS	new source performance standard
ppmv	parts per million by volume
lb/hr	pounds per hour
lb/MMBtu	pounds per million British thermal units
MMcf/hr	million cubic feet per hour
scfm	standard cubic feet per minute
TEQ	toxicity equivalents
TPY	tons per year
tons/hr	tons per hour
USEPA	United States Environmental Protection Agency
VMT/hr	vehicle miles traveled per hour

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
D/F	dioxins and furans

I. Facility Description and Equipment List

Facility Name: Continental Cement Company – Davenport Plant

Permit Number: 04-TV-007R3

Facility Description: Portland Cement Plant (SIC 3241)

Equipment List

A. Fugitives Subject to Fugitive Dust Rule Only

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
0010-0-F	0010--F	HC Storage Pile	N/A
0040-0-F	0040-3-F	Raw Materials Screening	N/A
0060-0-F	0060-1-F	Overburden Removal	N/A

B. Fugitives Subject to Fugitive Dust Rule and Iowa DNR Administrative Consent Order 98-AQ-08

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
0070-0-F	0070-1-F	Raw Materials Loading in Quarry	N/A
0081-0-F	0081-1-F	Quarry Drilling	N/A
0110-0-F	0110-1-F	Raw Materials Storage Pile	N/A
	0110-2-F	Storage Pile Load In/Out	
0120-0-F	0120-1-F	Raw Materials Storage Pile	N/A
	0120-2-F	Storage Pile Load In/Out	
0130-0-F	0130-1-F	Raw Materials Storage Pile	N/A
	0130-2-F	Storage Pile Load In/Out	
0200-0-F	0200-1-F	Front End Loader Filling Clay Hopper	N/A
	0200-2-F	Front End Loader Filling Stone Hopper	
	0200-3-F	Raw Material Transfer to Apron Feeder	
	0200-4-F	Dump Hopper to Apron Feeder	
	0200-5-F	Apron Feeder Transfer to Primary Crusher	
	0200-6-F	0225 Crusher Transfer to 0221	
	0200-7-F	0221 Belt Transfer to 0208	
	0200-8-F	0225 Primary Crusher Fugitives	
0203-0-F	0203-1-F	Raw Material Transfer-Conveyor to Conveyor	N/A
0300-0-F	0300-1-F	Raw Material Transfer-Conveyor to Conveyor	N/A
	0300-2-F	Raw Material Transfer-Conveyor to Conveyor	
	0300-3-F	Raw Material Transfer-Conveyor to Pile	
	0300-4-F	Raw Material Transfer-Pile to Conveyor	
0387-0-F	0387-1-F	Raw Material Transfer-Conveyor Over Road	N/A

C. Fugitives Subject to 40 CFR 63 Subpart LLL

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
0400-0-F	0400-1-F	0491, 0494, 0496 Weigh Feeders to 0489 Belt	N/A
0420-0-F	0420-1-F	0489 Belt Transfer to 0480 Roller Mill	N/A
0487-0-F	0487-1-F	0487 Slide Gate Truck Loading	N/A
0488-0-F	0488-1-F	0488 Manual Flop Gate Truck Loading	N/A
0576-0-F	0576-1-F	0576 Manual Flop Gate-Truck Loading	N/A
0718-0-F	0718-1-F	Clinker Bin Load Out-Truck Loading	N/A
0745-0-F	0745-1-F	West Silo Loadout Chute	N/A
0746-0-F	0746-1-F	East Silo Loadout Chute	N/A
0766-0-F	0766-1-F	0766 Feeder Transfer to 0722 Belt Conveyor	N/A
0706-0-F	0706-1-F	757 and 719 -Bucket Elevators	N/A
0800-0-F	0800-1-F	Finish Mill Building Fugitives	N/A
	0889-1-F	886 Belt Transfer to 0905 Belt	
	0826-1-F	826 Belt Conveyor	
0906-0-F	0906-1-F	0905 Belt Transfer to 0908 Hopper	N/A
0926-0-F	0926-1-F	0914 Belt Transfer to 0916 Hopper	N/A
1300-0-F	1300-1-F	Rail Loading Fugitives	N/A
	1300-2-F	Truck Loading Fugitives	
2601-0-F	2601-1-F	Barge Loading Spout Fugitives	N/A

D. Haulroads Subject to Administrative Consent Order No. 98-AQ-08

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
0155-0-F	0155-1-F	Quarry Haulroad-Rock Hauling	N/A
0160-0-F	0160-1-F	Quarry Haulroad-Clay Hauling	N/A
0165-0-F	0165-1-F	Haulroad-Clay from Storage Piles to Crusher	N/A
0691-0-F	0691-1-F	Haulroad-Rail Unloading Raw Materials	N/A
0692-0-F	0692-1-F	Haulroad-Rail Unloading Clinker	N/A
0695-0-F	0695-1-F	Haulroad-Rail Unloading Fuel	N/A
0765-0-F	0765-1-F	Unpaved Haulroad to 0765 Feeder	N/A
	0765-2-F	Paved Haulroad to 0765 Feeder	
1301-0-F	1301-1-F	Haulroad-Truck Loadout of Cement	N/A

E. New Haulroad

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
LMM	LMM	Plant Haul Road- Unpaved Road Segment LMM	17-A-461-S1

F. Conveying System Transfer Points\ Raw and Finish Mills\ Storage Bins\ Bulk Loading and Unloading Units Subject to 40 CFR 63 Subpart LLL

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
0404-0	0404-1	Raw Material Transfer- Conveyor to Homogenization Silos	78-A-229-S3
0420-0	0420-1	Raw Material Transfer- Airslides to Vertical Conveyor	78-A-228-S4

G. Conveying System Transfer Points\ Raw and Finish Mills\ Storage Bins\ Bulk Loading and Unloading Units Subject to 40 CFR 63 Subpart LLL (cont)

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
0498-0	0498-1	Raw Material Transfer- Conveyors to Preblend Bin	78-A-226-S5
0504-0	0504-1	Raw Material Transfer- Airslides/Separator/Bin to Kiln	78-A-230-S4
0709-0	0709-1	Drag Conveying Clinker	80-A-012-S3
0723-0-F	0723-1-F	Clinker Reclaim Vibrating Feeders	78-A-236-S4
0743-0	0743-1	Drag Conveying Clinker	78-A-235-S4
0811-0	0811-1	Finish Mill Holding Bin	80-A-013-S3
0817-0	0817-1	Finish Mill (Particulate Emissions)	78-A-237-S5
	0817-2	Finish Mill (VOC Emissions)	
0822-0	0822-1	Finish Mill Conveying System	78-A-238-S7
1007-0	1007-1	A&E Silos 16 and 18-30	76-A-003-S4
1009-0	1009-1	A&E Silos 15 and 17	11-A-175
1008-0	1008-1	Slag Transfer Airslide Dust Collector	05-A-634
1017-0	1017-1	Conebottom Silos # 31-40	76-A-004-S4
1041-0	1041-1	Rail Car Loading System- Silo # 41	88-A-076-S3
1044-0	1044-1	North Truck Loading Spout	86-A-015-S4
	1440-03	Airslide Conveyor	
	1442-05	Airslide Conveyor	
1045-0	1045-1	South Bulk Truck Loadout System	86-A-014-S3
1047-0	1047-1	Rail Car Loading System- Silos # 47 & 48	83-A-041-S3
1053-0	1053-1-(41-48)	West Overtrack Silos	78-A-242-S7
1449-0	1449-1	Silo 42	05-A-635-S1
2000-0	2000-1	SO2 Lime Injection Tank	07-A-949-S1
2001-0	2001-1	SO2 Lime Injection Bin	07-A-950-S1
2601-0	2601-1	Barge Loading Spout System	85-A-052-S7
26880-0	26880-1	Finish Mill High Efficiency Separator	18-A-156-S2
27006-0	27006-1	Cement Storage Dome	21-A-134-S1
27026-0	27024-1	Dome Air Slide	21-A-135

H. Storage Tanks

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
EP T-1	EUT-1	Storage Tank 1	07-A-1515

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
EP T-2	EUT-2	Storage Tank 2	07-A-1516
EP T-3	EU T-3	Storage Tank 3	07-A-1517
EP T-4	EU T-4	Storage Tank 4	07-A-1518

I. Miscellaneous Sources

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
0020-0	0020-1	Emergency Generator	99-A-136-S2
0030-0	0030-1	Diesel Water Pump	99-A-137-S1
0081-0	0081-1	Quarry Drill	87-A-080-S2
0203-0	0203-1	Raw Material Transfer in Transfer House-Conveyor to Conveyor	78-A-221-S6
0218-0	0218-1	Crushing and Conveying of Raw Materials	78-A-218-S7
0327-0-F	0327-1-F	Raw Material Transfer- Vibrating Feeder to Conveyor	78-A-223-S4
0466-0	0466-1	Rotary Cement Kiln Raw Mill	99-A-579-P9
0499-0	0499-1-F	20,000 gallon Fuel Oil Tank	98-A-1055-S1
0535-0	0535-1	CKD Handling Silo	97-A-789-S2
0611-0	0611-1	Clinker Cooler and Drag Conveyor	01-A-878-P1
0667-0	0667-1	Coal Mill and Bins	78-A-232-S3
	0667-2	Coal Mill and Bins	
0684-0	0684-1	Coal Silo	78-A-248-S6
0684-0-F	0684-1-F	Raw Material Transfer-Conveyor to Conveyor	N/A
0690-0-F	0690-3-F	Coal Hopper/Weigh Feeder-Load In/Out	96-A-645-S3
1310-0	1310-1	Pavement Cleaning	86-A-084-S1
1320-0	1320-1	Pavement Cleaning	86-A-085-S1
1510-0-F	1510-1-F	Clinker Truck Loading	19-A-712
1520-0-F	1520-1-F	Clinker Truck Unloading	19-A-713
1530-0-F	1530-1-F	Clinker Barge Loading	19-A-714

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
0040-1-F	Raw Materials Storage Pile
0040-2-F	Raw Materials Storage Pile Load In/Out
0040-4-F	Load Out of Screened Material
0082-1-F	Quarry Blasting
0204-1-F	Road Stone/Mason Stone Stockpile
0204-2-F	Storage Pile Load in/Load out
0207-1-F	Raw Material Transfer-Flop Gate
0499-1-F	Fuel Oil #2 Tank Vent
0538-1-F	CKD Load Out
0538-2-F	Haulroad-CKD to Landfill
0538-3-F	CKD Landfill Load Out
0655-1-F	Barge Load In/Out (Coal)
0655-2-F	Haulroad - Barge to Coal Stockpile
0677-1-F	0677 Manual Flop Gate-Truck Loading
0690-1-F	Coal Transfer-Conveyor to Conveyor
0690-2-F	Coal Piles - Wind Erosion
0690-4-F	Coal Stockpile Load In/Out
0696-1-F	Raw Materials Stockpiles Wind Erosion
0696-2-F	Stockpile Load in/Load out
0697-1-F	Rail Unloading Fuels, Raw Materials
0697-2-F	Rail Unloading: Clinker
0760-1-F	Stockpiles (North of Silo) – Wind Erosion
0760-2-F	Clinker Stockpile Load in /Load out
0760-3-F	Raw Material Stockpile-Load In/Out
0761-1-F	Unloading Gypsum Into Gypsum Hopper
0761-2-F	Unloading into Gypsum Hopper: Clinker
0770-1-F	Storage Hall Stockpile – wind Erosion
0770-2-F	Stockpile Load in/Load out – Clinker
0770-3-F	Stockpile Load in/Load out – Raw Materials
I-1	750 gal #2 Fuel Oil Storage Tank
I-6	500 gal #2 Fuel Oil Storage Tank
I-11	800 gal #1 Fuel Oil Storage Tank
I-12	2,000 gal Waste Mtr Oil Storage Tank
I-14	Two 5,524 Gallon #2 Fuel Oil Storage Tank
I-15	Two 10,000 Gallon Grinding Aid Storage Tanks (maximum vapor pressure 0.00003psia)
I-16	500 gal Antifreeze Storage Tank
I-17	Two 1,000 gal Lubricant/Oil Storage Tanks
I-18	500 gal Lubricant/Oil Storage Tanks
I-39	Maintenance Chute-Preheater Tower
I-40	Maintenance Chute-Clinker Cooler

Insignificant Emission Unit Number	Insignificant Emission Unit Description
I-41	Maintenance Chute-Coal Mill
I-42	Maintenance Chute-Raw Mill
I-43	Hot Water Heater (0.095 MMBtu/hr)
I-44	Hot Water Heater (30 psi boiler 1.2 MMBtu/hr)
I-45	Parts Washer-44 Gallon Cap.
I-46	Parts Washer-44 Gallon Cap.
I-47	4,000 Bushel Grain Storage Bin
I-48	Parts Washer-44 Gallon Cap.

II. Plant-Wide Conditions

Facility Name: Continental Cement Company – Davenport Plant

Permit Number: 04-TV-007R3

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

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

Commencing on: 01/26/2023

Ending on: 01/25/2028

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

Emission Limits

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

Opacity (visible emissions): 40% opacity

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

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

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

Particulate Matter:

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

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

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

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

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

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

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

Operational Limits & Requirements

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

The Permittee shall comply with all applicable requirements of *Iowa Department of Natural Resources Administrative Consent Order No. 98-AQ-08*.

Applicable Limits and Requirements From Iowa Department of Natural Resources Administrative Consent Order No. 98-AQ-08

See Appendix A

Authority for Requirement: Iowa Department of Natural Resources Administrative Consent Order No. 98-AQ-08

NSPS and NESHAP Applicability

40 CFR 60 Subpart A

This facility is an affected source and these *General Provisions* apply to the facility. The affected units are emission units 0327-1-F, 0667-1, 0667-2, 0684-1-F, 0466-1, 0400-1-F, 0420-1-F, 0487-1-F, 0488-1-F, 0576-1-F, 0718-1-F, 0745-1-F, 0746-1-F, 0766-1-F, 0706-1-F, 0906-1-F, 0926-1-F, 1300-1-F, 1300-2-F, 2601-1-F, 0404-1, 0420-1, 0498-1, 0504-1, 0709-1, 0723-1-F, 0743-1, 0811-1, 0817-1, 0817-2, 0822-1, 1007-1, 1009-1, 1008-1, 1017-1, 1041-1, 1044-0, 1045-1, 1047-1, 1053-1, 1449-1, 2000-1, 2001-1, 2601-1, 0203-1, and 0611-1.

See Appendix E for a link to the Standard.

Authority for Requirement: 40 CFR 60 Subpart A

567 IAC 23.1(2)

40 CFR 60 Subpart F

This facility is subject to Standards of Performance for *Portland Cement Plants*. The affected emission units are 0327-1-F and all of the units listed under the 40 CFR 63 Subpart LLL paragraph on the following page. The emission units subject to NESHAP Subpart LLL are exempt from any otherwise applicable new source performance standard contained in Subpart F that are less stringent than NESHAP Subpart LLL requirements per 40 CFR §63.1356 of Subpart LLL.

See Appendix E for a link to the Standard.

Authority for Requirement: 40 CFR Part 60 Subpart F

567 IAC 23.1(2)"c"

40 CFR 60 Subpart Y

This facility is subject to Standards of Performance for *Coal preparation Plants*. The affected units are emission units 0667-1, 0667-2, and 0684-1-F.

See Appendix E for a link to the Standard.

Authority for Requirement: 40 CFR Part 60 Subpart Y

567 IAC 23.1(2)"v"

40 CFR 60 Subpart DDDD

The kiln, emission unit 0466-1 is subject to Standards of Performance for *Commercial and Industrial Solid Waste Incineration Units that Commenced Construction on or before November 30, 1999*.

See Appendix E for a link to the Standards.

Authority for Requirement: 40 CFR Part 60 Subpart DDDD

40 CFR 61 Subparts A and E

The kiln, emission unit 0466-1, is subject to subpart A (*General Provisions*; 40 CFR §61.1 through 40 CFR §61.19) and Subpart E (*National Emission Standard for Mercury*; 40 CFR §61.50 through 40 CFR §61.56) of the NESHAP when the kiln uses materials in the *Water & Waste Treatment Byproducts* category listed in Emission Point-Specific Conditions section.

See Appendix E for a link to the Standard.

Authority for Requirements: 40 CFR 61 Subpart A
567 IAC 23.1(3)
40 CFR 61 Subpart E
567 IAC 23.1(3)"d"

40 CFR 63 Subpart A

This facility is an affected source and these *General Provisions* apply to the facility. The affected units are emission units 0400-1-F, 0420-1-F, 0487-1-F, 0488-1-F, 0576-1-F, 0718-1-F, 0745-1-F, 0746-1-F, 0766-1-F, 0706-1-F, 0906-1-F, 0926-1-F, 1300-1-F, 1300-2-F, 2601-1-F, 0404-1, 0420-1, 0498-1, 0504-1, 0709-1, 0723-1-F, 0743-1, 0811-1, 0817-1, 0817-2, 0822-1, 1007-1, 1009-1, 1008-1, 1017-1, 1041-1, 1044-0, 1045-1, 1047-1, 1053-1, 1449-1, 2000-1, 2001-1, 2601-1, 0203-1, 0611-1, 0020-1, 0030-1, and 0667-2.

See Appendix E for a link to the Standard.

Authority for Requirement: 40 CFR Part 63 Subpart A
567 IAC 23.1(4)

40 CFR 63 Subpart LLL

This facility is subject to the National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry. The affected units are emission units 0400-1-F, 0420-1-F, 0487-1-F, 0488-1-F, 0576-1-F, 0718-1-F, 0745-1-F, 0746-1-F, 0766-1-F, 0706-1-F, 0906-1-F, 0926-1-F, 1300-1-F, 1300-2-F, 2601-1-F, 0404-1, 0420-1, 0498-1, 0504-1, 0709-1, 0723-1-F, 0743-1, 0811-1, 0817-1, 0817-2, 0822-1, 1007-1, 1009-1, 1008-1, 1017-1, 1041-1, 1044-0, 1045-1, 1047-1, 1053-1, 1449-1, 2000-1, 2001-1, 2601-1, 0203-1, and 0611-1.

See Appendix E for a link to the Standard.

Authority for Requirements: 40 CFR 63 Subpart LLL
567 IAC 23.1(4)"bl"

40 CFR 63 Subpart ZZZZ

Emission units 0020-1 and 0030-1 are subject to the National Emission Standards for Hazardous Air Pollutants for *Stationary Reciprocating Internal Combustion Engines* (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ].

See Appendix E for a link to the Standard.

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

40 CFR 63 Subpart DDDDD

Emission unit 0677-2 is subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters .

See Appendix E for a link to the Standard.

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

I. Emission Point-Specific Conditions

Facility Name: Continental Cement Company – Davenport Plant
Permit Number: **04-TV-007R2**

Emission Point ID Number: See Table: Fugitives Subject to Fugitive Dust Rule Only

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Fugitives Subject to Fugitive Dust Rule Only

Table: Fugitives Subject to Fugitive Dust Rule Only

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (tons/hr)
0010-0-F	0010-1-F	HC Soils Storage Pile	HC Soils	46.0
0040-0-F	0040-3-F	Raw Materials Screening	Raw Materials ⁽¹⁾	76.0
0060-0-F	0060-1-F	Overburden Removal	Topsoil	2,000

⁽¹⁾ Raw materials refers to any one or a mixture of the kiln-stock materials used to produce cement, which are primarily limestone, clay, or alternative raw materials such as hydrocarbon contaminated soils. Coal and other primary fuel sources are not included in this category.

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.

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 particulate matter from becoming airborne in quantities sufficient to cause 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: See Table: Fugitives Subject to Fugitive Dust Rule
And Iowa DNR Administrative Consent
Order 98-AQ-08**

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Fugitives Subject to Fugitive Dust Rule and Iowa DNR Administrative Consent Order 98-AQ-08

Table: Fugitives Subject to Fugitive Dust Rule and Iowa DNR Administrative Consent Order 98-AQ-08

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
0070-0-F	0070-1-F	Raw Materials Loading in Quarry	Raw Materials ⁽¹⁾	2,000 tons/hr
0081-0-F	0081-1-F	Quarry Drilling	Limestone	2,500 tons/hr
0110-0-F	0110-1-F	Raw Materials Storage Pile	Raw Materials ⁽¹⁾	0.60 acres
	0110-2-F	Storage Pile Load In/Out	Raw Materials ⁽¹⁾	210 tons/hr
0120-0-F	0120-1-F	Raw Materials Storage Pile	Raw Materials ⁽¹⁾	0.41 acres
	0120-2-F	Storage Pile Load In/Out	Raw Materials ⁽¹⁾	210 tons/hr
0130-0-F	0130-1-F	Raw Materials Storage Pile	Raw Materials ⁽¹⁾	2.75 acres
	0130-2-F	Storage Pile Load In/Out	Raw Materials ⁽¹⁾	210 tons/hr
0200-0-F	0200-1-F	Front End Loader Filling Clay Hopper	Clay	210 tons/hr
	0200-2-F	Front End Loader Filling Stone Hopper	Limestone	1,400 tons/hr
	0200-3-F	Raw Material Transfer to Apron Feeder	Raw Materials ⁽¹⁾	210 tons/hr
	0200-4-F	Dump Hopper to Apron Feeder	Raw Materials ⁽¹⁾	1,400 tons/hr
	0200-5-F	Apron Feeder Transfer to Primary Crusher	Raw Materials ⁽¹⁾	1,400 tons/hr
	0200-6-F	0225 Crusher Transfer to 0221	Raw Materials ⁽¹⁾	1,400 tons/hr
	0200-7-F	0221 Belt Transfer to 0208	Raw Materials ⁽¹⁾	1,400 tons/hr
	0200-8-F	0225 Primary Crusher Fugitives	Raw Materials ⁽¹⁾	1,400 tons/hr
0203-0-F	0203-1-F	Raw Material Transfer-Conveyor to Conveyor	Raw Materials ⁽¹⁾	1,400 tons/hr
0300-0-F	0300-1-F	Raw Material Transfer-Conveyor to Conveyor	Raw Materials ⁽¹⁾	1,400 tons/hr

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
	0300-2-F	Raw Material Transfer-Conveyor to Conveyor	Raw Materials ⁽¹⁾	1,400 tons/hr
	0300-3-F	Raw Material Transfer-Conveyor to Pile	Raw Materials ⁽¹⁾	1,400 tons/hr
	0300-4-F	Raw Material Transfer-Pile to Conveyor	Raw Materials ⁽¹⁾	300 tons/hr
0387-0-F	0387-1-F	Raw Material Transfer-Conveyor Over Road	Raw Materials ⁽¹⁾	1,400 tons/hr

⁽¹⁾ Raw materials refers to any one or a mixture of the kiln-stock materials used to produce cement, which are primarily limestone, clay, or alternative raw materials such as hydrocarbon contaminated soils. Coal and other primary fuel sources are not included in this category.

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.

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 particulate matter from becoming airborne in quantities sufficient to cause 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"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below in Table: Fugitives Subject to Fugitive Dust Rule and Iowa DNR Administrative Consent Order 98-AQ-08-Operational Limits & Requirements.

Table: Fugitives Subject to Fugitive Dust Rule and Iowa DNR Administrative Consent Order 98-AQ-08 -Operational Limits & Requirements

Emission Point Number	Associated Emission Unit Number	Process Throughput Limit	Reporting & Recordkeeping ⁽¹⁾	Authority for Requirements
0070-0-F	0070-1-F	365,000 tons of raw material to the crusher per month	The quantity of raw materials crushed shall be recorded monthly.	Section IV(2) Iowa Department of Natural Resources Administrative Consent Order No. 98-AQ-08

Table: Fugitives Subject to Fugitive Dust Rule and Iowa DNR Administrative Consent Order 98-AQ-08 -Operational Limits & Requirements (Cont.)

Emission Point Number	Associated Emission Unit Number	Process Throughput Limit	Reporting & Recordkeeping ⁽¹⁾	Authority for Requirements
0081-0-F	0081-1-F	365,000 tons of raw material to the crusher per month	The quantity of raw materials crushed shall be recorded monthly.	Section IV(2) Iowa Department of Natural Resources Administrative Consent Order No. 98-AQ-08
0110-0-F	0110-1-F	55,480 tons of clay to the crusher per month	The quantity of clay crushed shall be recorded monthly.	
	0110-2-F			
0120-0-F	0120-1-F	55,480 tons of clay to the crusher per month	The quantity of clay crushed shall be recorded monthly.	
	0120-2-F			
0130-0-F	0130-1-F	55,480 tons of clay to the crusher per month		
	0130-2-F			
0200-0-F	0200-1-F	365,000 tons of raw materials to the crusher per month and transferred to the kiln, of which 128,480 tons may be alternative raw materials and clay.	The quantity of raw material and clay crushed shall be recorded monthly	
	0200-2-F			
	0200-3-F			
	0200-4-F			
	0200-5-F			
	0200-6-F			
	0200-7-F			
	0200-8-F			
0203-0-F	0203-1-F	365,000 tons of raw material to the crusher per month	The quantity of raw material crushed shall be recorded monthly.	
0300-0-F	0300-1-F	365,000 tons of raw material to the crusher per month	The quantity of raw materials crushed shall be recorded monthly.	
	0300-2-F			
	0300-3-F			
	0300-4-F			
0387-F	0387-1-F	365,000 tons of raw material crushed per month	The quantity of raw materials crushed shall be recorded monthly.	

⁽¹⁾ The records shall be kept on site for a minimum of five years, and shall be available for inspection by the Department.

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: See Table: Fugitives Subject to
40 CFR 63 Subpart LLL**

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Fugitives Subject to 40 CFR 63 Subpart LLL

Table: Fugitives Subject to 40 CFR 63 Subpart LLL

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (tons/hr)
0400-0-F	0400-1-F	0491, 0494, 0496 Weigh Feeders to 0489 Belt	Raw Materials ⁽¹⁾	300
0420-0-F	0420-1-F	0489 Belt Transfer to 0480 Roller Mill	Raw Materials ⁽¹⁾	300
0487-0-F	0487-1-F	0487 Slide Gate-Truck Loading	Raw Materials ⁽¹⁾	10
0488-0-F	0488-1-F	0488 Manual Flop Gate-Truck Loading	Raw Materials ⁽¹⁾	300
0576-0-F	0576-1-F	0576 Manual Slide Gate Load Out	Clinker	30
0718-0-F	0718-1-F	Clinker Bin Load Out-Truck Loading	Clinker	180
0745-0-F	0745-1-F	West Silo Loadout Chute	Clinker	180
0746-0-F	0746-1-F	East Silo Loadout Chute	Clinker	180
0766-0-F	0766-1-F	0766 Feeder Transfer to 0722 Belt Conveyor	Clinker, Gypsum	180
0706-0-F	0706-1-F	757 and 719 Bucket Elevators	Clinker	220
0800-0-F	0800-1-F	Finish Mill Building Fugitives	Clinker	180
	0889-1-F	0886 Belt Conveyor Transfer to 0905 Belt	Cement	200
	0826-1-F	826 Belt Conveyor	Clinker	180
0906-0-F	0906-1-F	0905 Belt Conveyor Transfer to 0908 Hopper	Cement	200
0926-0-F	0926-1-F	0914 Belt Conveyor Transfer to 0916 Hopper	Cement	200
1300-0-F	1300-1-F	Rail Loading Fugitives	Cement	600
	1300-2-F	Truck Loading Fugitives	Cement	300
2601-0-F	2601-1-F	Barge Loading Spout Fugitives	Cement	360

⁽¹⁾ Raw materials refers to any one or a mixture of the kiln-stock materials used to produce cement, which are primarily limestone, clay, or alternative raw materials such as hydrocarbon contaminated soils. Coal and other primary fuel sources are not included in this category.

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.

Pollutant: Opacity

Emission Limit(s): 10%

Authority for Requirement: 567 IAC 23.1(4)"bl"
40 CFR 63.1345

NSPS and NESHAP

These emission units are subject to Subpart LLL (*National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry*; 40 CFR §63.1340 – §63.1358), but per 40 CFR §63.1356 of Subpart LLL these units are exempted from any otherwise applicable new source performance standard contained in 40 CFR 60 Subpart F, to which they are also subject.

An O & M plan is required by Subpart LLL for these emission units. Relevant requirements of O & M plan for this equipment: Opacity - **see Appendix B**.

Authority for Requirements: 40 CFR 60 Subpart F
567 IAC 23.1(2)"c"
40 CFR 63 Subpart LLL
567 IAC 23.1(4)"bl"

Operational Limits & Requirements

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

Emission Point Number	Associated Emission Unit Number	Process Throughput Limit	Reporting & Recordkeeping ⁽¹⁾	Authority for Requirements
0400-0-F	0400-1-F	365,000 tons of raw material to the crusher per month	The quantity of raw materials crushed shall be recorded monthly.	Section IV(2) Iowa Department of Natural Resources Administrative Consent Order No. 98-AQ-08
0800-0-F	0800-1-F	17,082 tons of gypsum usage per month	The quantity of gypsum used shall be recorded monthly.	
1300-0-F	1300-1-F	262,800 tons of cement production per month	The quantity of cement produced shall be recorded monthly.	
	1300-2-F			
2601-0-F	2601-1-F			

⁽¹⁾ The records shall be kept on site for a minimum of five (5) years, and shall be available for inspection by the Department.

Additional Reporting & Recordkeeping:

A. Recordkeeping for NESHAP 40 CFR 63 Subpart LLL at the facility shall be done per 40 CFR 63.1355.

Authority for Requirement: 567 IAC 23.1(4)"bl"
40 CFR 63.Subpart LLL

Monitoring Requirements

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

With the exception of emission points 0400-0-F and 1300-0-F, which are totally enclosed and thus exempt from periodic opacity monitoring [40 CFR 63.1350(f)(v)], the facility shall check the opacity as described in 40 CFR 63.1350 (f).

Authority for Requirement - 567 IAC 23.1(4)"bl"
40 CFR 63.1350

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: See Table: Haulroads Subject to Administrative Consent Order No. 98-AQ-08

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Haulroads Subject to Administrative Consent Order No. 98-AQ-08

Table: Haulroads Subject to Administrative Consent Order No. 98-AQ-08

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (VMT/hr)
0155-0-F	0155-1-F	Quarry Haulroad-Rock Hauling	Unpaved Road	16.47
0160-0-F	0160-1-F	Quarry Haulroad-Clay Hauling	Unpaved Road	2.47
0165-0-F	0165-1-F	Haulroad-Clay from Storage Piles to Crusher	Unpaved Road	3.31
0691-0-F	0691-1-F	Haulroad-Rail Unloading Raw Materials	Paved Road	14.77
0692-0-F	0692-1-F	Haulroad-Rail Unloading Clinker	Paved Road	2.27
0695-0-F	0695-1-F	Haulroad-Rail Unloading Fuel	Paved Road	4.55
0765-0-F	0765-1-F	Unpaved Haulroad to 0765 Feeder	Unpaved Road	0.63
	0765-2-F	Paved Haulroad to 0765 Feeder	Paved Road	0.63
1301-0-F	1301-1-F	Haulroad-Truck Loadout of Cement	Paved Road	0.93

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.

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 particulate matter from becoming airborne in quantities sufficient to cause 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"

Operational Limits & Requirements

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

Process throughput: See Section IV(2.) Iowa Department of Natural Resources Administrative Consent Order No. 98-AQ-08 in Appendix A.

Work practice standards: See Section IV(1.) Iowa Department of Natural Resources Administrative Consent Order No. 98-AQ-08 in Appendix A.

Reporting & Record keeping

Records as specified in Section IV(1.) and (2.) Iowa Department of Natural Resources Administrative Consent Order No. 98-AQ-08 in Appendix A shall be kept on site for a minimum of five years. The records shall be available for inspection upon request by representatives of the Department of Natural Resources.

Authority for Requirement: Iowa Department of Natural Resources Administrative Consent Order No. 98-AQ-08

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: LMM

Associated Equipment

Associated Emission Unit ID Numbers: LMM

Emission Unit vented through this Emission Point: LMM
Emission Unit Description: Plant Haul Road Segment LMM
Raw Material: Unpaved Road

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.

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 particulate matter from becoming airborne in quantities sufficient to cause 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"

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 7.37 lb/day ⁽¹⁾

Authority for Requirement: DNR Construction Permit 17-A-461-S1

- (1) Correlates to a total surface silt content of 2.1 percent, maximum truck traffic travel distance and 75 percent reduction for dust suppressant application as specified in the Operating Requirements with Associated Monitoring and Recordkeeping section below.

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records for Unpaved Road Segment LMM:

- A. The owner or operator is limited to hauling 635,000 tons per rolling 12-month period, not to exceed 100,000 tons in any one month on unpaved road segment (LMM).
 - i. The owner or operator shall maintain record of the tons of material hauled on unpaved road segment (LMM) for each calendar month of use.
 - ii. The owner or operator shall calculate and record 12-month rolling month totals of material hauled on unpaved road segment (LMM) in tons.

- B. The owner or operator shall utilize control measures to achieve 75 percent reduction of particulate emissions generated on unpaved road segment LMM while in use except as noted in conditions iii and iv below. These measures include any of the following
- i. Chemical dust suppressant application. The owner or operator shall apply chemical dust suppressant to the road surface at minimum frequency twice per calendar month,
 - ii. Water application: The owner or operator shall apply water to the road surface as a rate to maintain the road surface as a wet surface at all times during use.
 - iii. If the suppressant application cannot be applied because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35° F (1.7° C) or conditions due to weather could create hazardous driving conditions, then the suppressant application shall be postponed and applied immediately after the scheduled date as the conditions preventing the application have abated
 - iv. Suppressant application need not occur when a rain gauge located at the site indicates that at least 0.2 inches of precipitation (water equivalent) has occurred within the preceding 24-hour time period. However, suppressant application shall resume within 24-hours after the precipitation event has ended
- C. If visible emissions are observed from Unpaved Road Segment LMM during use, the owner or operator shall immediately apply water or chemical dust suppressant to haul road segment LMM.
- D. The total surface material silt content shall not exceed 2.1 percent on unpaved road segment LMM.
- i. Performance testing on the haul road surface silt content shall be completed on a quarterly basis. Performance testing shall be completed prior to any suppressant application. The silt content sampling shall be conducted according to the procedures outlined in AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading and Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples.
 - ii. The owner or operator shall maintain a log of each silt load sampling event that contains the following: a) The date of silt sampling event; b) The location of the sample taken; c) The measured silt content as percent d) Sample area used for silt sampling in feet; and, e) The operator's initials.
 - iii. The owner or operator shall maintain record of the silt content results expressed as percent for each quarter.
- E. The owner or operator shall maintain as record of the suppressant application on unpaved road segment LMM. The record shall include suppressant application frequency, quantity applied and suppressant utilized. If suppressant is not applied due to weather as specified in conditions B.iii and B.iv above, a written record must be kept on site outlining the conditions and when suppressant application resumed.
- F. Best Management Practices (BMP) – The owner or operator shall implement “good housekeeping” or best management practices to minimize fugitive emissions from unpaved road segment LMM. Such practices may include but are not limited to:
- i. Clean up spills of materials on the road surface as expeditiously as possible and in a manner consistent with good practice for minimizing dust emissions,
 - ii. Post and maintain speed limit (5 mph) signs,
 - iii. Apply additional suppressant to material unloading/loading areas as necessary to prevent track out of material on the traveled road surface.

- G. The owner or operator shall develop a written plan to implement, at a minimum, the Best Management Practices as specified in condition F above. The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.

Authority for Requirement: DNR Construction Permit 17-A-461-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 Numbers: See Table: Conveying System Transfer Points\
Raw and Finish Mills\ Storage Bins\ Bulk Loading
and Unloading Units Subject to 40 CFR 63
Subpart LLL**

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Conveying System Transfer Points\ Raw and Finish Mills\ Storage Bins\ Bulk Loading and Unloading Units Subject to 40 CFR 63 Subpart LLL

Emissions Control Equipment ID Number: See Table: Conveying System Transfer Points\ Raw and Finish Mills\ Storage Bins\ Bulk Loading and Unloading Units Subject to 40 CFR 63 Subpart LLL

Emissions Control Equipment Description: See Table: Conveying System Transfer Points\Raw and Finish Mills\Storage Bins\ Bulk Loading and Unloading Units Subject to 40 CFR 63 Subpart LLL

Table: Conveying System Transfer Points\ Raw and Finish Mills\ Storage Bins\ Bulk Loading and Unloading Units Subject to 40 CFR 63 Subpart LLL

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Control Equipment Number	Control Equipment Description	Raw Material	Rated Capacity
0404-0	0404-1	Raw Material Transfer-Conveyor to Homo. Silos	0404-C	Baghouse	Raw Materials ⁽¹⁾	280 tons/hr
0420-0	0420-1	Raw Material Transfer-Airslides to Vert. Conveyor	0420-C	Baghouse	Raw Materials ⁽¹⁾	290 tons/hr
0498-0	0498-1	Raw Material Transfer-Conveyors to Preblend Bin	0498-C	Baghouse	Raw Materials ⁽¹⁾	280 tons/hr
0504-0	0504-1	Raw Material Transfer-Airslides/Separator/Bin to Kiln	0504-C	Baghouse	Raw Materials ⁽¹⁾	300 tons/hr
0709-0	0709-1	Drag Conveying Clinker	0709-C	Baghouse	Clinker	220 tons/hr
0723-0-F	0723-1-F	Clinker Reclaim Vibrating Feeders	0723-C	Baghouse	Clinker	90 tons/hr
			0724-C	Baghouse		
			0725-C	Baghouse		
			0726-C	Baghouse		
			0727-C	Baghouse		
			0732-C	Baghouse		
0743-0	0743-1	Drag Conveying Clinker	0743-C	Baghouse	Clinker	220 tons/hr
0811-0	0811-1	Finish Mill Holding Bin	0811-C	Baghouse	Cement	75 Tons
0817-0	0817-1	Finish Mill	0817-C	Baghouse	Clinker, Gypsum	75 tons/hr
0822-0	0822-1	Finish Mill Conveying System	0822-C	Baghouse	Cement	195 tons/hr

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Control Equipment Number	Control Equipment Description	Raw Material	Rated Capacity
2601-0-F	2601-1-F	Uncaptured Emissions from Finished Product Barge Loading	N/A	N/A	N/A	N/A
1007-0	1007-1	A.E. Silos # 16 & 18-30	1007-C	Baghouse	Cement	200 tons/hr
1008-0	1008-1	Slag Transfer Airslide	1008-C	Baghouse	Slag/Limestone	200 tons/hr
1009-0	1009-1	Slag Storage Silo 15/17	1093-C	Baghouse	Slag/Limestone	200 tons/hr
1017-0	1017-1	Conebottom Silos # 31-40	1017-C	Baghouse	Cement	102.8 tons/hr
1041-0	1041-1	Rail Car Loading System-Silo # 41	1041-C	Baghouse	Cement	300 tons/hr
1044-0	1044-0	North Truck Loading Spout	1044-C	Baghouse	Cement	150 tons/hr
	1440-03	Airslide Conveyor				150 tons/hr
	1442-05	Airslide Conveyor				150 tons/hr
1045-0	1045-1	South Bulk Truck Loadout System	1045-C	Baghouse	Cement	150 tons/hr
1047-0	1047-1	Rail Car Loading System-Silos # 47 & 48	1047-C	Baghouse	Cement	3,200 tons/hr
1053-0	1053-1	Overtrack Silos (41-48)	1053-C	Baghouse	Cement	200 tons/hr
1449-0	1449-1	Silo 42	1053-C	Baghouse	Cement	300 tons/hr
2000-0	2000-1	SO ₂ Lime Injection Tank	2301-C	Baghouse	Lime	135 Tons
2001-0	2001-1	SO ₂ Lime Injection Bin	2311-C	Baghouse	Lime	10 Tons
2601-0	0951-1	Air Slide to Loading Spout	2601-C	Barge Loadout Filter Receiver	Cement	360 tons/hr
	2601-1	Filter Receiver				360 tons/hr
	0966-1	Air Slide				360 tons/hr
26880-0	26880-1	Finish Mill High Efficiency Separator	2688-C	Baghouse	Cement	505 tons/hr
27006-0	27006-1	Cement Storage Dome	27006-C	Baghouse	Cement	195 tons/hr
27026-0	27024-1	Dome Air Slide	27026-C	Baghouse	Cement	300 tons/hr

⁽¹⁾ Raw materials refers to any one or a mixture of the kiln-stock materials used to produce cement, which are primarily limestone, clay, or alternative raw materials such as hydrocarbon contaminated soils. Coal and other primary fuel sources are not included in this category.

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified in Table: Conveying System Transfer Points\ Raw and Finish Mills\ Storage Bins\ Bulk Loading and Unloading Units Subject to 40 CFR 63 Subpart LLL -Emission Limits

Table: Conveying System Transfer Points\ Raw and Finish Mills\ Storage Bins\ Bulk Loading and Unloading Units Subject to 40 CFR 63 Subpart LLL-Emission Limits.

Emission Point Number	Associated Emission Unit Number	Opacity Limit ⁽³⁾	PM ₁₀ Limit (lb/hr)	PM _{2.5} Limit (lb/hr)	PM Limit (lb/hr)	Construction Permit #
0404-0	0404-1	10 % ⁽¹⁾	3.33	N/A	N/A	78-A-229-S3
0420-0	0420-1	10 % ⁽¹⁾	0.56	N/A	N/A	78-A-228-S4
0498-0	0498-1	10 % ⁽¹⁾	1.16	N/A	N/A	78-A-226-S5
0504-0	0504-1	10 %	2.08	N/A	N/A	78-A-230-S4
0709-0	0709-1	10 % ⁽¹⁾	0.64	N/A	N/A	80-A-012-S3
0723-0-F	0723-1-F	10 % ⁽¹⁾	0.43	N/A	N/A	78-A-236-S4
0743-0	0743-1	10 % ⁽²⁾	3.02	N/A	N/A	78-A-235-S4
0811-0	0811-1	10 % ⁽¹⁾	0.62	N/A	N/A	80-A-013-S3
45 0817-0	0817-1	10% ⁽¹⁾	6.17	N/A	N/A	78-A-237-S5
0822-0	0822-1	10%	2.66	2.66	2.66	78-A-238-S7
1007-0	1007-1	10 % ⁽¹⁾	0.60	N/A	N/A	76-A-003-S4
1009-0	1009-1	10 % ⁽¹⁾	0.86	N/A	N/A	11-A-175
1008-0	1008-1	10%	0.47	N/A	0.47	05-A-634
1017-0	1017-1	10 % ⁽¹⁾	0.60	N/A	N/A	76-A-004-S4
1041-0	1041-1	10 % ⁽¹⁾	0.34	N/A	N/A	88-A-076-S3
1044-0	1044-0	10 % ⁽¹⁾	0.52	N/A	N/A N/A	86-A-015-S4
	1440-03			N/A		
	1442-05			N/A		
1045-0	1045-1	10 % ⁽¹⁾	0.52	N/A	N/A	86-A-014-S3
1047-0	1047-1	10 % ⁽¹⁾	0.38	N/A	N/A	83-A-041-S3
1053-0	1053-1-(41-48)	10 % ⁽¹⁾	0.83	N/A	0.83	78-A-242-S7
1449-0	1449.1	10%	2.14	N/A	2.14	05-A-635-S1
2000-0	2000-1	10 % ⁽¹⁾	0.22	N/A	N/A	07-A-949-S1
2001-0	2001-1	10 % ⁽¹⁾	0.09	N/A	N/A	07-A-950-S1
2601-0	0951-1	10 % ⁽¹⁾	1.0	N/A	1.0	85-A-052-S7
	2601-1					
	0966-1					
2601-0-F	2601-1-F	⁽⁴⁾	⁽⁵⁾	N/A	N/A	
26880-0	26880-1	10%	9.21	4.33	9.21	18-A-156-S2
27006-0	27006-1	10%	1.01	0.30	1.01	21-A-134-S1
27026-0	27024-1	10%	0.1	0.03	0.1	21-A-135

⁽¹⁾ If opacity greater than that observed in the initial performance test is viewed other than startup, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

(2) 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).

(3) Additional authority for requirement: 567 IAC 23.1(4)"bl" and 40 CFR 63.1345.

(4) The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property.

(5) The emission limit is established at 1.92 pounds of PM10 per day, which correlates to a maximum finished product barge loading throughput of 5,760 tons per day and a minimum loading system capture efficiency of 95 percent. The emission limit is established for attainment and maintenance of the PM10 National Ambient Air Quality Standards (NAAQS) as approved into the State Implementation Plan (SIP) by the U.S. EPA on March 18, 1999 (64 FR 13343).

Pollutant: Particulate Matter(PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: DNR Construction Permits specified in Table: Conveying System
Transfer Points\ Raw and Finish Mills\ Storage Bins\ Bulk Loading and
Unloading Units Subject to 40 CFR 63 Subpart LLL -Emission Limits
567 IAC 23.3(2)"a"

NSPS and NESHAP

These emission units are subject to Subpart LLL (*National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry*; 40 CFR §63.1340 – §63.1358), but per 40 CFR §63.1356 of Subpart LLL these units are exempted from any otherwise applicable less restrictive new source performance standard contained in 40 CFR 60 Subpart F, to which they are also subject.

An O & M plan is required by Subpart LLL for these emission units. Relevant requirements of O & M plan for this equipment: Opacity-see **Appendix B**.

Authority for Requirements: 40 CFR 60 Subpart F
567 IAC 23.1(2)"c"
40 CFR 63 Subpart LLL
567 IAC 23.1(4)"bl"

Operational Requirements with Associated Monitoring and Recordkeeping

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

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

Operating Limits

For Emission Units 0498-1, 0709-1, 0743-1, 1007-1, 1008-1, 1009-1, 1017-1, 1041-1, 1044-0, 1440-03, 1442-05, 1045-1, 1047-1, , 1449-1, 2000-1, 2001-1, and 2601-1

Control equipment parameters:

A. The baghouse shall be operated and maintained per the manufacturer's recommendations.

Reporting & Record keeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records:

A. The owner or operator shall keep records of all maintenance conducted on the baghouse.

Authority for Requirement: DNR Construction Permits 78-A-226-S5, 80-A-012-S3, 78-A-235-S4, 11-A-175, 05-A-634, 76-A-003-S4, 76-A-004-S4, 88-A-076-S3, 86-A-015-S4, 86-A-014-S3, 83-A-041-S3, 78-A-242-S7, 05-A-635-S1, 07-A-949-S1, 07-A-950-S1, 85-A-052-S2, and 05-A-634

For all emission sources

A. Monitoring for NESHAP Subpart LLL at the facility (plant number 82-04-005) shall be done per 40 CFR §63.1350.

B. Recordkeeping for NESHAP 40 CFR 63 Subpart LLL at the facility shall be done per 40 CFR § 63.1355

Authority for Requirement: DNR Construction Permits specified in Table: Non-Fugitive Sources Subject to 40 CFR 63 Subpart LLL-Emission Limits
567 IAC 23.1(4)"bl"
40 CFR 63.Subpart LLL

For Emission Units 0817-1, 0822-1, 1053-1-(41-48), 0951-1, 2601-1, 0966-1, 26880-1, 27006-0 & 27026-0 Only:

NSPS and NESHAP REQUIREMENTS

- A. The owner or operator shall comply with the applicable requirements in 40 CFR Part 60, Subparts A (*General Provisions*) and F (*Standards of Performance for Portland Cement Plants*), including those not specifically mentioned in this permit.
 - i. Per 40 CFR §60.64(b)(3), for any source subject to the 10 percent opacity limit, the owner or operator shall follow the appropriate monitoring procedures in §63.1350(f).
- B. The owner or operator shall comply with the applicable requirements in 40 CFR Part 63, Subparts A (*General Provisions*) and LLL (*National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry*), including those not specifically mentioned in this permit.
 - i. Per 40 CFR §63.1347(a), the owner or operator shall develop a written operations and maintenance plan that shall contain the information described in §63.1347(a)(1) through (a)(3).
 - ii. Per 40 CFR §63.1347(b), failure to comply with any provision of the operations and maintenance plan developed in accordance with §63.1347(a) is a violation of the standard.
 - iii. Per 40 CFR §63.1350(f)(v), the owner or operator shall operate and maintain the enclosures for the conveying system as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
 - iv. The owner or operator shall comply with the appropriate notification requirements in 40 CFR §63.9 and §63.1353.
 - v. The owner or operator shall comply with the appropriate reporting requirements in 40 CFR §63.10 and §63.1354.
 - vi. The owner or operator shall comply with the appropriate recordkeeping requirements in 40 CFR §63.10 and §63.1355.

CONTROL EQUIPMENT REQUIREMENTS

- C. The owner or operator shall conduct visible emissions observations on the Emission Unit once per calendar day. This requirement shall not apply on the days that the Emission Unit is not in operation.
 - i. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions.
 - ii. If visible emissions from the Emission Unit are observed, the owner or operator shall investigate the emission unit or control equipment and make corrections to the associated operations or equipment.
 - iii. The owner or operator shall maintain a record of all corrective actions taken.
- D. The owner or operator shall inspect and maintain the control equipment according to the manufacturer's specifications and instructions.
 - i. The owner or operator shall keep a log of all inspection and maintenance activities performed on the control equipment. At a minimum, this log shall include:
 - 1. The date that any inspection and/or maintenance was performed on the control equipment;
 - a) The owner or operator shall conduct inspection activities at a minimum of once per calendar year.

- 2.Any issues identified during any inspection and maintenance activities and the date each issue was resolved; and
- 3.Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permits specified in Table: Non-Fugitive Sources Subject to 40 CFR 63 Subpart LLL-Emission Limits
567 IAC 23.1(4)"bl"
40 CFR 63.Subpart LLL

For Emission Unit 1053-1-(41-48) Only:

NSPS and NESHAP REQUIREMENTS

- i. Per 40 CFR §63.1350(p), the owner or operator shall develop a site-specific monitoring plan according to the requirements in paragraphs §63.1350(p)(1) through (4) and (o)(5).

Authority for Requirement: DNR Construction Permit 78-A-242-S7

For Emission Units 0951-1, 2601-1, & 0966-1 Only:

NSPS and NESHAP REQUIREMENTS

- i. Per 40 CFR §63.1350(f)(v), the owner or operator shall operate and maintain the enclosures for the conveying system as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
- ii. Per 40 CFR §63.1350(p), the owner or operator shall develop a site-specific monitoring plan according to the requirements in paragraphs §63.1350(p)(1) through (4) and (o)(5).

Authority for Requirement: DNR Construction Permit 85-A-052-S7

For Emission Unit 26880-1 Only:

NSPS and NESHAP REQUIREMENTS

- i. Per 40 CFR §63.1350(f), the owner or operator shall conduct opacity monitoring in accordance with the provisions in paragraphs §63.1350(f)(1)(i) through (vii) and in accordance with the monitoring plan developed under §63.1350(p).
- ii. Per 40 CFR §63.1350(p), the owner or operator shall develop a site-specific monitoring plan according to the requirements in paragraphs §63.1350(p)(1) through (4).

Authority for Requirement: DNR Construction Permit 18-A-156-S2

For Emission Units 27006-0 & 27026-0 Only:

NSPS and NESHAP REQUIREMENTS

- i. Per 40 CFR §63.1350(f), the owner or operator shall conduct opacity monitoring in accordance with the provisions in paragraphs §63.1350(f)(1)(i) through (vii) and in

- accordance with the monitoring plan developed under §63.1350(p).
- ii. Per 40 CFR §63.1350(p), the owner or operator shall develop a site-specific monitoring plan according to the requirements in paragraphs §63.1350(p)(1) through (4) and (o)(5).

Authority for Requirement: DNR Construction Permits 21-A-134-S1 & 21-A-135

Emission Point Characteristics

These emission points shall conform to the conditions specified in Table: Conveying System Transfer Points\Raw and Finish Mill\Storage Bins\Bulk Loading and Unloading Units Subject to 40 CFR 63 Subpart LLL-Emission Point Characteristics

Table: Conveying System Transfer Points\Raw and Finish Mill\Storage Bins\Bulk Loading and Unloading Units Subject to 40 CFR 63 Subpart LLL-Emission Point Characteristics

Emission Point Number	Emission Unit Number	Construction Permit #	Stack Characteristics				Discharge Style
			Stack Height (feet from Ground)	Stack Opening (inches)	Exhaust Flow Rate (scfm)	Exhaust Temp. (°F)	
0404-0	0404-1	78-A-229-S3	133	25 x 46	19,500	70	Vertical, Unobstructed
0420-0	0420-1	78-A-228-S4	97	12 x 18	2,700	200	Vertical, Unobstructed
0498-0	0498-1	78-A-226-S5	75	22.3	6,750	75	Vertical Unobstructed
0504-0	0504-1	78-A-230-S4	322	21 x 29	10,500	150	Vertical, Unobstructed
0709-0	0709-1	80-A-012-S3	101	17.1	3,750	70	Vertical Unobstructed
0723-0-F	0723-1-F	78-A-236-S4	Vents Inside	Vents Inside	Vents Inside	Vents Inside	Vents Inside
0743-0	0743-1	78-A-235-S4	208	35.5	17,600	70	Vertical Unobstructed
0811-0	0811-1	80-A-013-S3	116.5	56	2,900	200	Vertical, Unobstructed
0817-0	0817-1	78-A-237-S5	116.5	42.5	37,430	200	Vertical, Unobstructed
0822-0	0822-1	78-A-238-S7	140	35.3	6,000	110	Vertical, Unobstructed
1007-0	1007-1	76-A-003-S4	105	12.7	3,041	150	Vertical Unobstructed
1009-0	1009-1	11-A-175	115	15.4	5,000	70	Vertical Unobstructed
1008-0	1008-1	05-A-634	Vents Inside	12	1,100	Ambient	Vents Inside
1017-0	1017-1	76-A-004-S4	120	16	2,811	200	Vertical Unobstructed
1041-0	1041-1	88-A-076-S3	120	8	2,000	70	Vertical Unobstructed
1044-0	1044-0	86-A-015-S4	120	12	3,000	70	Vertical Unobstructed
	1440-03						
	1044-0						
1045-0	1045-1	86-A-014-S3	120	12	3,000	70	Vertical Unobstructed
1047-0	1047-1	83-A-041-S3	120	8	2,190	70	Vertical Unobstructed
1053-0	1053-1-(41-48)	78-A-242-S7	140	15	6,360	150	Vertical Unobstructed
1449-0	1449-1	05-A-635-S1	175	18	5,000	70	Vertical, Unobstructed
2000-0	2000-1	07-A-949-S1	80	9	1,300	70	Vertical Unobstructed
2001-0	2001-1	07-A-950-S1	300	5.6	500	70	Vertical Unobstructed
2601-0	0951-1	85-A-052-S7	75	25	12,880	100	Vertical Unobstructed
	2601-1						
	0966-1						
2601-0-F	2601-1-F		N/A	N/A	N/A	N/A	N/A
26880-0	26880-1	18-A-156-S2	143	78.7	85,000	200	Vertical Unobstructed
27006-0	27006-1	21-A-134-S1	215	28	11,773	150	Vertical Unobstructed
27026-0	27024-1	21-A-135	Vents Inside	Vents Inside	1200	150	Vents Inside

Authority for Requirement: DNR Construction Permits specified in Table: Conveying System Transfer Points\ Raw and Finish Mills\ Storage Bins\ Bulk Loading and Unloading Units Subject to 40 CFR 63 Subpart LLL –Emission Point Characteristics.

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

Monitoring Requirements

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

The facility shall check the opacity as described in 40 CFR 63.1350 (f).

Authority for Requirement: DNR Construction Permits specified in Table: Non-Fugitive Sources Subject to 40 CFR 63 Subpart LLL-Emission Limits
567 IAC 23.1(4)"bl"
40 CFR 63.1350

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 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: See Table: Storage Tanks

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Storage Tanks

Table: Storage Tanks

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (gallons)	Construction Permit Number
T-1	EU T-1	Storage Tank 1	Glycerine Byproducts	30,000	07-A-1515
T-2	EU T-2	Storage Tank 2	Glycerine Byproducts	30,000	07-A-1516
T-3	EU T-3	Storage Tank 3	Glycerine Byproducts	30,000	07-A-1517
T-4	EU T-4	Storage Tank 4	Glycerine Byproducts	30,000	07-A-1518

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 emission limits at this time.

Operational Limits & Requirements

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

Process throughput:

- A. The maximum true vapor pressure of any material stored in these units shall be less than 15.0 kPa (2.18 psi).

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records:

- A. A log of all materials stored in these units and their maximum true vapor pressure.
B. A copy of the Material Safety Data Sheets for each material stored in these units.

Authority for Requirement: DNR Construction Permits specified in Table: Storage Tanks

Emission Point Characteristics

These emission points shall conform to the conditions specified below.

Stack Height, (ft, from the ground): 20

Stack Opening, (inches, dia.): 2.5

Exhaust Flow Rate (scfm): Displacement Air

Exhaust Temperature (°F): 100

Discharge Style: Unobstructed Vertical

Authority for Requirement: DNR Construction Permits specified in Table: Storage Tanks

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

Monitoring Requirements

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

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: 0020-0

Associated Equipment

Associated Emission Unit ID Numbers: 0020-1

Emission Unit vented through this Emission Point: 0020-1

Emission Unit Description: Emergency Generator

Raw Material/Fuel: #2 Fuel Oil

Rated Capacity: 250 KW, 335 HP

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limits: 40 %⁽¹⁾

Authority for Requirement: DNR Construction Permit 99-A-136-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 (PM₁₀)

Emission Limits: 0.74 lb/hr

Authority for Requirement: DNR Construction Permit 99-A-136-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 99-A-136-S2
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: DNR Construction Permit 99-A-136-S2
567 IAC 23.3(3)"b"

NSPS and 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.

Compliance Date

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

Operation and Maintenance Requirements 40 CFR 63.6602, 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 and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Recordkeeping Requirements 40 CFR 63.6655

1. Keep records of the maintenance conducted on the stationary RICE.
2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation,

including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

Notification and Reporting Requirements 40 CFR 63.6645, 63.6650 and Table 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"

Operational Limits & Requirements

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

Hours of operation:

- A. This emission unit shall operate no more than 500 hours per twelve (12) month period, rolled monthly.

Process throughput:

- B. The fuel used shall not have a sulfur content greater than 0.5%.

Reporting & Record keeping

All records as required by this permit below shall be kept on site for five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. For each fuel shipment received, maintain a copy of the vendor's certification or other documentation of the sulfur content of the fuel received.
- B. At the end of each month, record the reading of the hour meter on this unit.
- C. At the end of each month, record the number of hours this unit has operated over the previous month.
- D. At the end of each month, record the number of hours this unit has operated over the previous twelve (12) months.

Authority for Requirement: DNR Construction Permit 99-A-136-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

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

Stack Opening, (inches, dia.): 6

Exhaust Flow Rate (scfm): 442

Exhaust Temperature (°F): 500

Discharge Style: Unobstructed Vertical

Authority for Requirement: DNR Construction Permit 99-A-136-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 0030-0

Associated Equipment

Associated Emission Unit ID Numbers: 0030-1

Emission Unit vented through this Emission Point: 0030-1

Emission Unit Description: Diesel Water Pump

Raw Material/Fuel: #2 Fuel Oil

Rated Capacity: 182 hp

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limits: 40 %⁽¹⁾

Authority for Requirement: DNR Construction Permit 99-A-137-S1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

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

Pollutant: Particulate Matter (PM₁₀)

Emission Limits: 0.43 lb/hr

Authority for Requirement: DNR Construction Permit 99-A-137-S1

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: DNR Construction Permit 99-A-137-S1
567 IAC 23.3(3)"b"

NSPS and 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.

Compliance Date

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

Operation and Maintenance Requirements 40 CFR 63.6602, 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 and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Recordkeeping Requirements 40 CFR 63.6655

3. Keep records of the maintenance conducted on the stationary RICE.
4. Keep records of the hours of operation of the engine that is recorded through the 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

3. An initial notification is not required per 40 CFR 63.6645(a)(5).
4. 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"

Operational Limits & Requirements

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

Hours of operation:

A, This unit shall operate no more than 500 hours per twelve (12) month period, rolled monthly.

Process throughput:

B. The fuel consumed in this unit shall have a sulfur content not greater than 0.5% by weight.

Reporting & Record keeping

All records as required by this permit below shall be kept on site for five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. For each shipment received, maintain a copy of the vendor's certification or other documentation of the sulfur content of the fuel received.
- B. At the end of each month, record the reading of the hour meter on this unit.
- C. At the end of each month, record the number of hours this unit has operated over the previous month.
- D. At the end of each month, record the number of hours this unit has operated over the previous twelve (12) months..

Authority for Requirement: DNR Construction Permit 99-A-137-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 12.75

Stack Opening, (inches, dia.): 6

Exhaust Flow Rate (scfm): 800

Exhaust Temperature (°F): 500

Discharge Style: Unobstructed Vertical

Authority for Requirement: DNR Construction Permit 99-A-137

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

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic 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: 0081-0

Associated Equipment

Associated Emission Unit ID Numbers: 0081-1
Emissions Control Equipment ID Number: 0081-C
Emissions Control Equipment Description: Bag Filter

Emission Unit vented through this Emission Point: 0081-1
Emission Unit Description: Quarry Drill
Raw Material/Fuel: N/A
Rated Capacity: N/A

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limits: 40 %⁽¹⁾
Authority for Requirement: DNR Construction Permit 87-A-080-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 standard.

Pollutant: Particulate Matter (PM₁₀)
Emission Limits: 0.13 lb/hr
Authority for Requirement: DNR Construction Permit 87-A-080-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/scf
Authority for Requirement: DNR Construction Permit 87-A-080-S2
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): 8

Stack Opening, (inches, dia.): 8

Exhaust Flow Rate (scfm): 2,700

Exhaust Temperature (°F): 70

Discharge Style: Unobstructed Vertical

Authority for Requirement: DNR Construction Permit 87-A-080-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 0203-0

Associated Equipment

Associated Emission Unit ID Numbers: 0203-1
Emissions Control Equipment ID Number: 0203-C
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: 0203-1
Emission Unit Description: Raw Material Transfer in Transfer House-Conveyor to Conveyor
Raw Material/Fuel: Raw Materials⁽¹⁾
Rated Capacity: 1,300 tons/hr

⁽¹⁾ Raw materials refers to any one or a mixture of the kiln-stock materials used to produce cement, which are primarily limestone, clay, or alternative raw materials such as hydrocarbon contaminated soils. Coal and other primary fuel sources are not included in this category.

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): 10%
Authority for Requirement: 40 CFR 60.62(c)
567 IAC 23.1(2)"c"

Pollutant: Opacity
Emission Limit(s): 40%⁽¹⁾
Authority for Requirement: DNR Construction Permit 78-A-221-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: Particulate Matter (PM₁₀)
Emission Limits: 0.72 lb/hr
Authority for Requirement: DNR Construction Permit 78-A-221-S6

Pollutant: Particulate Matter (PM)
Emission Limits: 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 78-A-221-S6
567 IAC 23.3(2)"a"

NSPS and NESHAP

This emission unit is subject to Subpart LLL (*National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry*; 40 CFR §63.1340 – §63.1358), but per 40 CFR §63.1356 of Subpart LLL this unit is exempted from any otherwise applicable new source performance standard contained in Subpart F, to which it is also subject.

An O & M plan is required by Subpart LLL for these emission units. Relevant requirements of O & M plan for this equipment: Opacity - **see Appendix B**.

Authority for Requirements: 40 CFR 60 Subpart F
567 IAC 23.1(2)"c"
40 CFR 63 Subpart LLL
567 IAC 23.1(4)"bl"

Operational Limits & Requirements

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

Process throughput: This process is limited to transferring 365,000 tons of raw materials per month.

Reporting & Record keeping

The quantity of raw material transferred to the crusher shall be recorded monthly, records shall be kept on site for a minimum of five years, and shall be available for inspection by the Department.

Authority for Requirement: Section IV(2) Iowa Department of Natural Resources
Administrative Consent Order No. 98-AQ-08

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 5.6
Stack Opening, (inches, dia.): 7.8
Exhaust Flow Rate (scfm): 4,200
Exhaust Temperature (°F): Ambient
Discharge Style: Unobstructed Vertical
Authority for Requirement: DNR Construction Permit 78-A-221-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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

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

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 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: 0218-0

Associated Equipment

Associated Emission Unit ID Numbers: 0218-1

Emissions Control Equipment ID Number: 0218-C

Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: 0218-1

Emission Unit Description: Crushing and Conveying of Raw Materials

Raw Material/Fuel: Raw Materials⁽¹⁾

Rated Capacity: 1,300 tons/hr

⁽¹⁾ Raw materials refers to any one or a mixture of the kiln-stock materials used to produce cement, which are primarily limestone, clay, or alternative raw materials such as hydrocarbon contaminated soils. Coal and other primary fuel sources are not included in this category.

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 78-A-218-S7
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 (PM₁₀)

Emission Limits: 5.59 lb/hr

Authority for Requirement: DNR Construction Permit 78-A-218-S7

Pollutant: Particulate Matter (PM)

Emission Limits: 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 78-A-218-S7
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:

The following supplemental materials may be utilized in the crushers as listed below:

<u>Material</u>	<u>Maximum Tons Per Hour</u>
1. Coal Combustion Residue	400
2. Foundry By-Products	1300
3. Hydrocarbon Containing Soils	210
4. Refinery By-Products	105
5. Oils and Greases	0
<u>Total Feed</u>	1300

Reporting & Record keeping

All records, as required by this permit, shall be kept on site for a minimum of five (5) years and be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

The records shall show the following:

Materials utilized by the crushers. This record shall show the individual material, the amount of that material (in tons), the percentage of the total for that material, and the total of all materials (in tons/hr).

Authority for Requirement: DNR Construction Permit 78-A-218-S7

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 4.0

Stack Opening, (inches.): 12 x 30

Exhaust Flow Rate (scfm): 32,600

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 78-A-218-S7

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☒ No ☐
See Appendix C

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 0327-0-F

Associated Equipment

Associated Emission Unit ID Numbers: 0327-1-F

Emission Unit vented through this Emission Point: 0327-1

Emission Unit Description: Raw Material Transfer-Vibrating Feeder to Conveyor

Raw Material/Fuel: Raw Materials⁽¹⁾

Rated Capacity: 250 tons/hr

⁽¹⁾ Raw materials refers to any one or a mixture of the kiln-stock materials used to produce cement, which are primarily limestone, clay, or alternative raw materials such as hydrocarbon contaminated soils. Coal and other primary fuel sources are not included in this category.

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): 10%⁽¹⁾

Authority for Requirement: DNR Construction Permit 78-A-223-S4

40 CFR 60.62(c)

567 IAC 23.1(2)"c"

⁽¹⁾ If opacity greater than that observed in the initial performance test is viewed other than startup, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: Particulate Matter (PM₁₀)

Emission Limits: 0.34 lb/hr

Authority for Requirement: DNR Construction Permit 78-A-223-S4

Pollutant: Particulate Matter (PM)

Emission Limits: 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 78-A-223-S4

567 IAC 23.3(2)"a"

NSPS and NESHAP

This emission unit is subject to NSPS Subpart A:General Provisions and NSPS Subpart F: Standards of Performance for Portland Cement Plants.

Authority for Requirement: 40 CFR 60 Subpart F

567 IAC 23.1(2)"c"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): Vents into preblend storage dome

Stack Opening, (inches, dia.): Vents into preblend storage dome

Exhaust Flow Rate (scfm): Vents into preblend storage dome

Exhaust Temperature (°F): Vents into preblend storage dome

Discharge Style: Vents into preblend storage dome

Authority for Requirement: DNR Construction Permit 78-A-223-S4

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

Monitoring Requirements

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

Opacity Monitoring

Visible emissions shall be observed on a monthly basis using EPA Method 22 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 (>10 %) 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.

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(14)

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: 0466-0

Associated Equipment

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
0466-1	Rotary Cement Kiln (300 tons/hr)	145.3 tons clinker/hr	Dry Absorbent Addition (CE 0466-2-C)
	Raw Mill (300 tons/hr)		Raw Mill Baghouse (CE 0466a-C) Alkali Bypass Baghouse (CE 0594-C) Selective Non-catalytic Reduction (CE 0466-3-C)

Raw Material/Fuel: Raw Materials⁽¹⁾ and Fuel

⁽¹⁾ Raw materials refers to any one or a mixture of the kiln-stock materials used to produce cement, which are primarily limestone, clay, or alternative raw materials such as hydrocarbon contaminated soils. Coal and other primary fuel sources are not included in this category.

Applicable Requirements

BACT Emission Limits When Production is Less Than or Equal to 108 Tons of Clinker per Hour (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 58.67 grams/second and 465.65 lb/hr (expressed as a 3-hour average)

Authority for Requirement: DNR Construction Permit 99-A-579-P9

BACT Emission Limits When Production is Greater Than 108 Tons of Clinker per Hour (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): 10%

Authority for Requirement: DNR Construction Permit 99-A-579-P9

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.516 lb/ton of clinker

Authority for Requirement: DNR Construction Permit 99-A-579-P9

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.516 lb/ton of clinker

Authority for Requirement: DNR Construction Permit 99-A-579-P9

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 4,850 tons/yr ^{(1) (2)}
Authority for Requirement: DNR Construction Permit 99-A-579-P9

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 2,546 tons/yr ^{(1) (2)}, 4.0 lb/ton of clinker ⁽³⁾
Authority for Requirement: DNR Construction Permit 99-A-579-P9

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 4.5 lb/ton of clinker
Authority for Requirement: DNR Construction Permit 99-A-579-P9

⁽¹⁾ Limit is a 12-month rolling total. Applies at all times including periods of startup, shutdown, or malfunction.

⁽²⁾ Compliance with the applicable emission standards of this permit are based on the CEM data from the owner/operator. Hourly emissions shall be the average of four 15-minute averages analyzed and recorded by the CEM.

⁽³⁾ Limit is a monthly rolling average. Limit does not apply during startup, shutdown, or malfunction. Compliance with this emission standard shall be calculated by the owner/operator by:

- Totaling the pounds of NO_x recorded by the CEMS during normal operation over the last twelve months of operation.
- Totaling the tons of clinker produced over the last twelve months operation.
- Dividing the pounds of NO_x by the tons of clinker produced.

Other Emission Limits

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 75.0 lb/hr ⁽⁶⁾; 100 lbs/hr⁽⁹⁾; 34.48 lbs/hr ⁽¹⁰⁾
Authority for Requirement: DNR Construction Permit 99-A-579-P9

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 99-A-579-P9
567 IAC 23.4(3)

Pollutant: Particulate Matter (PM)
Emission Limit(s): 100 lbs/hr⁽⁹⁾; 34.48 lbs/hr ⁽¹⁰⁾
Authority for Requirement: DNR Construction Permit 99-A-579-P9

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 2,900 lb/hr ⁽⁴⁾; 66,500 lb/day ^(4,5); and 4,850 tons/yr ^(4,7)
Authority for Requirement: DNR Construction Permit 99-A-579-P9

Pollutant: Mercury (Hg)
Emission Limit(s): 3.2 kg/24 hr period ⁽⁸⁾
Authority for Requirement: DNR Construction Permit 99-A-579-P9
40 CFR 61 Subpart E
567 IAC 23.1(3)"d"

⁽⁴⁾ Compliance with the applicable emission standards of this permit are based on the CEM data from the owner/operator. Hourly emissions shall be the average of four 15-minute averages analyzed and recorded by the CEM.

⁽⁵⁾ Standard is expressed as a 24-hour rolling total. The limit applies at all times including periods of startup, shutdown, or malfunction.

⁽⁶⁾ Emission rate used in the facility-wide SIP (State Implementation Plan) maintenance plan dispersion modeling to demonstrate no exceedences of the National Ambient Air Quality Standards (NAAQS).

⁽⁷⁾ Facility-wide limit per the consent decree entered into between the United States and Lafarge North America, Inc. [Civil Action 3:10-cv-00044-JPG-CJP, United States District Court for the Southern District of Illinois (March 18, 2010)]

⁽⁸⁾ Per 40 CFR 61.52(b). Standard applies when the kiln uses materials in the *Water & Waste Treatment Byproducts* category listed under Operating Limits, below.

⁽⁹⁾ The emission rate also applies to PM_{2.5}. NOTE: The emission limit applies when the raw mill is off.

⁽¹⁰⁾ The emission rate also applies to PM_{2.5}. NOTE: The emission limit applies when the raw mill is on.

40 CFR Part 60 Subpart DDDD Emission Limitations

See Appendix D

Authority for Requirement: 40 CFR 60 Subpart DDDD

NSPS and NESHAP

Both the emission unit and the source (plant number 82-04-005) are subject to Subpart A (*General Provisions*; 40 CFR §60.1 through 40 CFR §60.19) of the New Source Performance Standards (NSPS) and Subpart A (*General Provisions*; 40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories.

This source (plant number 82-04-005) is subject to Subpart LLL (*National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry*; 40 CFR §63.1340 – 40 CFR §63.1358). Please note that EPA amended NESHAP Subpart LLL on February 12, 2013 and the source (plant number 82-04-005) may be subject to requirements in those amendments.

This emission unit is not subject to the requirements of NESHAP Subpart LLL as it is subject to the Commercial and Industrial Solid Waste Incinerator (CISWI) Rule (either 40 CFR Part 60 Subpart CCCC or 40 CFR Part 60 Subpart DDDD) according to an August 6, 2014 determination made by the Environmental Protection Agency (EPA). If the owner or operator discontinues the combustion of solid waste in this emission unit and the emission unit is no longer considered a solid waste incineration unit as defined in 40 CFR Part 241 the emission unit will then be subject to the requirements of NESHAP Subpart LLL.

This emission unit is an affected facility per NSPS Subpart F (*Standards of Performance for Portland Cement Plants*; 40 CFR §60.60 through 40 CFR §60.66). Per 40 CFR §60.62(d), if an owner or operator has an affected source subject to Subpart F with a different emission limit or requirement for the same pollutant under another regulation in Title 40 of CFR, the owner or operator must comply with the most stringent emission limit or requirement and is not subject to the less stringent requirement. Please note that EPA amended NSPS Subpart F on February 12, 2013 and this emission unit may be subject to requirements in those amendments.

This emission unit is subject to Subpart A (*General Provisions*; 40 CFR §61.1 through 40 CFR §61.19) and Subpart E (*National Emission Standard for Mercury*; 40 CFR §61.50 through 40 CFR §61.56) of the NESHAP when the kiln uses materials in the *Water & Waste Treatment Byproducts* category listed below in Operational Limits & Requirements Condition F.

Authority for Requirement: DNR Construction Permit 99-A-579-P9

40 CFR 60 Subpart F
567 IAC 23.1(2)"c"
40 CFR 60 Subpart CCCC
40 CFR 60 Subpart DDDD
40 CFR 61 Subpart E
567 IAC 23.1(3)"d"
40 CFR 63 Subpart LLL
567 IAC 23.1(4)"bl"

Operational Requirements with Associated Monitoring and Recordkeeping

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

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

EQUIPMENT OPERATION REQUIREMENTS

- A. The operation of the rotary cement kiln while the raw mill is off for scheduled maintenance shall be limited to 480 hours per rolling 12-month period.
 - i. The owner or operator shall record the number of hours that EU 0466-1 operated while the raw mill is off on a monthly basis.
 - ii. The owner or operator shall calculate and record the number of hours that EU 0466-1 operated while the raw mill is off on a rolling 12-month basis.
- B. The operation of the rotary cement kiln while the raw mill is operating shall be limited to 7,656 hours per rolling 12-month period.
 - i. The owner or operator shall record the number of hours that the rotary cement kiln operated while the raw mill is operating on a monthly basis.
 - ii. The owner or operator shall calculate and record the number of hours that the rotary cement kiln operated while the raw mill is operating on a rolling 12-month basis.
- C. The rotary cement kiln is limited to firing on the fuels and alternative fuels listed in Section A of Attachment A of the construction permit and all subsequent determination letters.
- D. The raw mill air preheater is limited to firing on fuel oil, natural gas, used oil, ethanol, and biodiesel products/byproducts.
- E. The supplemental raw materials listed in Section B of Attachment A of the construction permit and all subsequent determination letters may be utilized by the rotary cement kiln and the raw mill.
- F. The owner or operator shall only burn used oil while the rotary cement kiln and raw mill system is at normal operating temperatures and not during periods of startup or shutdown.
 - i. The owner or operator shall develop and implement written operating procedures to ensure that used oil is not burned during periods of startup or shutdown.
 - ii. The owner or operator shall document any deviations from the written operating

procedures.

- G. At least thirty (30) days prior to the use of any fuels or materials not listed in Attachment A to the construction permit, the owner or operator shall submit to the Department for review and approval a “*Profile Analysis Plan*” for the new fuel or material. At a minimum, the “*Profile Analysis Plan*” shall include:
- i. A “*Profile Analysis*” including, but not limited to:
 1. A description of the new fuel or material;
 2. A complete chemical analysis of the new fuel or material which includes, but is not limited to:
 1. Fuel type/category
 2. Heat content (BTU value)
 3. Nitrogen (N) content
 4. Sulfur (S) content
 5. Lead (Pb) content
 6. Chlorine (Cl) content
 7. Mercury (Hg) content
 8. Cadmium (Cd) content
 3. An evaluation of the impact on air emissions;
 4. The procedures to be used for the “*Profile Analysis*,”
 5. The frequency of testing; and
 6. The information to be stored and retention time of that information.
 - ii. The owner or operator shall not use the “*Profile Analysis*” until it is approved by the Department. Any amendments to the “*Profile Analysis Plan*” shall be submitted to and approved by the Department prior to use.
 - iii. If approved, the “*Profile Analysis*” may be used in lieu of testing each shipment of the new fuel or material.

FEED RATE LIMITS REQUIREMENTS

- H. The feed rate of obsolete seed shall not exceed 5.0 tons per hour.
- i. The owner or operator shall maintain on-site daily records on the amount, in tons per hour, of obsolete feed used by the rotary cement kiln.
- I. The hourly feed rate of the following supplemental materials is limited to the amounts listed below:

		MAXIMUM TONS PER HOUR	
	Material	Raw Mill	Rotary Cement Kiln
1	Coal Combustion Residue	30	30
2	Foundry By-Products	30	30
3	Hydrocarbon Containing Soils	46	46
4	Refinery By-Products	30	30
5	Oils and Greases	0	2
	Total Feed	300	300

- J. Simultaneous feeding of the supplemental materials listed in Section B of Attachment A to the construction permit is allowed, but the combined total of the materials shall not exceed twenty (20) percent of the total material being fed to the rotary cement kiln at any given time.
- K. The owner or operator shall maintain on-site daily records of the materials used in the rotary

cement kiln and the raw mill. These daily records shall include the following:

- i. The name of the individual material used;
- ii. The total amount, in tons per hour, of the material used;
- iii. The total amount, in tons per hour, of all materials used;
- iv. The percentage of the total for the material used; and
- v. Whether the raw mill, or the rotary cement kiln, or both utilized the material

FUEL SPECIFICATIONS REQUIREMENTS

L. Any fuel used shall not have a lead (Pb) content greater than 500 parts per million (ppm).

- i. The owner or operator shall maintain on-site records of the lead (Pb) content of used fuel or other alternative fuel fired in the rotary cement kiln or raw mill air preheater. The fuel analysis sent with the fuel shipment or the most recent profile information collected and maintained according to the “*Profile Analysis Plan*” in Permit Condition 5.E may be an adequate demonstration for this record.
- ii. If the lead-containing fuels have been received from a single supplier and a uniform process for a period of at least six (6) consecutive months, the Pb sampling frequency may be reduced to once per week or once every ten (10) loads, whichever occurs earlier, under the following conditions:
 1. At least twenty-four (24) loads have been received and analyzed over the 6-month period;
 2. All samples analyzed during the 6-month period show lead concentrations to be less than 50 ppm; and
 3. A statement is obtained from the fuel supplier certifying the following:
 1. The alternative fuel is a product of a consistent process and
 2. If the process is altered in any manner that would result in an increase in the Pb concentration of the alternative fuel by 50 ppm or more, the supplier will notify the owner or operator prior to sending the fuel.
- iii. If a sample is found to contain more than 50 ppm Pb, the owner or operator shall revert back to sampling each batch of fuel until all the requirements in Construction Permit Condition 5.H.ii are met once again.

M. The owner or operator shall comply with the applicable requirements in 40 CFR Part 279, Subparts B (*Applicability*) and G (*Standards for Used Oil Burners who burn Off-Specification Used Oil for Energy Recovery*), including those not specifically mentioned in this permit.

- i. Per 40 CFR §279.10(b)(1)(ii) and in accordance with 40 CFR §279.63(c), if the used oil contains greater than or equal to 1,000 ppm total halogens, it is presumed to be a hazardous waste. The owner or operator may rebut the presumption by demonstrating that the used oil does not contain significant concentrations of the halogenated hazardous constituents listed in Appendix VIII of 40 CFR Part 261 (*Identification and Listing of Hazardous Waste*).
- ii. Per 40 CFR §279.63(a), to ensure that used oil managed at a used oil burner facility is not hazardous waste under the rebuttable presumption of 40 CFR §279.10(b)(1)(ii), the owner or operator shall determine whether the total halogen content of used oil managed at the facility is above or below 1,000 ppm.
- iii. Per 40 CFR §279.63(b), the owner or operator shall determine the halogen content of the used oil by:
 1. Testing the used oil; or
 2. Applying knowledge of the halogen content of the used oil in light of the materials or processes used; or

- 3.If the used oil has been received from a processor/re-refiner subject to regulation under 40 CFR Part 279, Subpart F (*Standards for Used Oil Processors and Re-Refiners*), using information proved by the processor/re-refiner.
- iv. Per 40 CFR §279.63(d), the owner or operator shall maintain records of analyses conducted or information used to comply with the requirements in 40 CFR §279.63. These records shall be kept by the burner for a period of 3 years.
 - 1.These records shall include the total halogen content concentration, in ppm, for the used oil burned.
 - 2.If the total halogen content concentration is greater than or equal to 1,000 ppm, the owner or operator shall also maintain the rebuttal demonstration for the used oil showing that it does not contain hazardous waste.
- N. The polychlorinated biphenyl (PCB) concentration of any used oil combusted shall be less than 50 ppm.
 - i. The owner or operator shall maintain on-site records of the used oil PCB content. These records shall be either:
 - 1.Testing to determine the PCB concentration on individual samples, or in accordance with the testing procedures described in 40 CFR §761.60(g)(2) or
 - 2.Other information documenting that the used oil fuel does not contain PCBs in a concentration equal to or greater than 50 ppm, including either personal, special knowledge of the source and composition of the used oil or a certification from the person generating the used oil claiming that the used oil contains no detectable PCBs.

NATIONAL EMISSION STANDARDS for HAZARDOUS AIR POLLUTANTS REQUIREMENTS

- O. The owner or operator shall comply with the applicable requirements in 40 CFR Part 61, Subparts A (*General Provisions*) and E (*National Emission Standard for Mercury*), including those not specifically mentioned in this permit.
 - i. Per 40 CFR §61.55(a), for all the sources at a wastewater treatment plant sludge incineration plant for which mercury emissions exceed 3.5 pounds (1.6 kg) per 24-hour period, demonstrated either by stack sampling according to §61.53 or sludge sampling according to §61.54, the owner or operator shall monitor mercury emissions at intervals of at least once per year by use of Method 105 of Appendix B or the procedures specified in §61.53 (d) (2) and (4). The results of monitoring shall be reported and retained according to §61.53(d) (5) and (6) or §61.54 (f) and (g).

SULFUR DIOXIDE (SO₂) and NITROGEN OXIDES (NO_x) EMISSION LIMITS REQUIREMENTS

- P. The owner or operator shall demonstrate compliance with the SO₂ emission limitations in Permit Conditions 1a and 1c by using a Continuous Emissions Monitoring System (CEMS) as specified in Permit Condition 6.B. The pounds per hour of SO₂ emitted by the rotary cement kiln and raw mill system shall be determined as the average of four 15-minute averages analyzed and recorded by the CEMS.
 - i. The SO₂ emitted by the rotary cement kiln and raw mill system (EU 0466-1) shall not exceed 66,500 pounds per each operating day, based on a rolling 24-hour period. An operating day is defined as a 24-hour period between 12:00 midnight and the following

midnight during which any clinker is produced at any time by EU 0466-1. It is not necessary for clinker to be produced continuously for the entire 24-hour period.

1. The owner or operator shall use the CEMS data to calculate and record the pounds of SO₂ emitted by EU 0466-1 on a daily basis.
- ii. The SO₂ emitted by the rotary cement kiln and raw mill system (EU 0466-1) shall not exceed 4,850 tons per each 12-month period.
 1. The owner or operator shall use the CEMS data to calculate and record the tons of SO₂ emitted by EU 0466-1 on a monthly basis.
 2. The owner or operator shall use the CEMS data to calculate and record the tons of SO₂ emitted by EU 0466-1 on a rolling 12-month basis.
- Q. The owner or operator shall demonstrate compliance with the NO_x emission limitations in Construction Permit Condition 1a by using a Continuous Emissions Monitoring System (CEMS) as specified in Construction Permit Condition 6.C. The pounds per hour of NO_x emitted by the rotary cement kiln and raw mill system shall be determined as the average of four 15-minute averages analyzed and recorded by the CEMS.
 - i. The NO_x emitted by the rotary cement kiln and raw mill system (EU 0466-1) shall not exceed 2,546 tons per each 12-month rolling period.
 1. The owner or operator shall use the CEMS data to calculate and record the tons of NO_x emitted by EU 0466-1 on a monthly basis.
 2. The owner or operator shall use the CEMS data to calculate and record the tons of NO_x emitted by EU 0466-1 on a rolling 12-month basis.
 - ii. The NO_x emitted by the rotary cement kiln and raw mill system (EU 0466-1) shall not exceed 4.0 pounds per ton of clinker produced, based on a month rolling average.
 1. The owner or operator shall total the pounds of NO_x recorded by the CEMS during normal operation over the last twelve months of operation.
 2. The owner or operator shall record the total amount, in tons, of clinker produced by EU 0466-1 over the last twelve months of operation.
 3. The owner or operator shall divide the total pounds of NO_x emitted by the tons of clinker produced.
- R. Per Paragraph 92 of USA v. Lafarge North America, Inc. et al, 3:10-cv-00044, No. 45 (S.D. III. Mar. 18, 2010), emissions reductions of SO₂ and/or NO_x resulting from compliance with the requirements of the Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting credit under the Clean Air Act's Nonattainment New Source Review (NA NSR) and Prevention of Significant Deterioration (PSD) programs.

CONTROL EQUIPMENT REQUIREMENTS

- S. Per Paragraph 75 of USA v. Lafarge North America, Inc. et al, 3:10-cv-00044, No. 45 (S.D. III. Mar. 18, 2010), the owner or operator shall continuously operate the Dry Absorbent Addition (DAA) technology during all times of operation of the rotary cement kiln, except during period of DAA technology malfunction.
- T. The owner or operator shall inspect and maintain the control equipment according to the manufacturer's specifications and instructions and/or the facility's (Plant No. 82-04-005) operation and maintenance plan.
 - i. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. At a minimum, this log shall include:
 1. The date that any inspection and/or maintenance was performed on the control

- equipment;
 - 2. Any issues identified during the inspection;
 - 3. Any issues addressed during the maintenance activities and the date each issue was resolved; and
 - 4. Identification of the staff member performing the maintenance or inspection.
- U. The owner or operator shall operate the Selective Non-catalytic Reduction system (SNCR) (CE 0466-3-C) as necessary to meet the NO_x emission limits.
- i. Record the amount of ammonia injected into the kiln on a continuous basis whenever the SNCR is operated.
 - ii. Record the amount of ammonia slip at the exhaust of the kiln (same location as the existing NO_x sampling probe) on a continuous basis whenever the SNCR is operated.

Authority for Requirement: DNR Construction Permit 99-A-579-P9

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 340

Stack Opening, (inches, dia.): 108

Exhaust Flow Rate (scfm): 175,000

Exhaust Temperature (°F): 300

Discharge Style: Unobstructed Vertical

Authority for Requirement: DNR Construction Permit 99-A-579-P9

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

Monitoring Requirements

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

Stack Testing

Pollutant – Particulate Matter (PM₁₀)

Stack Test to be Completed once per calendar year, once with the Raw Mill on and once with the Raw Mill off

Test Method - 40 CFR 51, Appendix M, 201A with 202

Authority for Requirement – DNR Construction Permit 99-A-579-P9

Pollutant – Particulate Matter (PM)

Stack Test to be Completed once per calendar year, once with the Raw Mill on and once with the Raw Mill off

Test Method - 40 CFR 60, Appendix A, Method 5; 40 CFR 51, Appendix M, Method 202

Authority for Requirement – DNR Construction Permit 99-A-579-P9

Pollutant – Mercury (Hg) ⁽¹⁾

Stack Test to be Completed by – For each new water or waste treatment byproduct approved for use in the kiln ⁽²⁾

Test Method - 40 CFR 60, Appendix A, Method 18

Authority for Requirement – DNR Construction Permit 99-A-579-P9

⁽¹⁾ Stack test or sludge sampling. Per 40 CFR §61.53(d), unless a waiver of emission testing is obtained under 40 CFR §61.13, testing is required within ninety (90) days of use of any sludge in the kiln. Sludge means sludge produced by a treatment plant that processes municipal or industrial waste waters (40 CFR §61.51). This includes materials in the *Water & Waste Treatment Byproducts* category listed in condition F of the Operating Limits section above. Testing shall be conducted in accordance with the procedures set forth either in 40 CFR §61.53(d) or in 40 CFR §61.54.

⁽²⁾ Unless specifically waived by the Department testing is required for each new *water or waste treatment byproduct* approved for use in the kiln.

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)

Stack Testing is required to be performed annually per 40 CFR 60.2145(b) and 60.2710(b).

See Appendix D

Authority for Requirement: 40 CFR 60 Subpart DDDD

Continuous Emissions Monitoring:

- A. The owner or operator shall continuously demonstrate compliance with the opacity limits in this permit through the use of a Continuous Opacity Monitoring System (COMS). As a result, the owner or operator shall install, calibrate, maintain, and operate a COMS for measuring the opacity of the emissions discharged to the atmosphere through Emission Point 0466-0 and shall record the output of the system.
 - i. The CEMS shall be designed to meet the specifications and test procedures for continuous opacity monitoring systems in stationary sources described in 40 CFR Part 60, Appendix B, Performance Specification 1 (PS1).
- B. The owner or operator shall continuously demonstrate compliance with the sulfur dioxide (SO₂) limits in this permit through the use of a Continuous Emission Monitoring System (CEMS). As a result, the owner or operator shall install, calibrate, maintain, and operate a CEMS for measuring SO₂ emissions discharged to the atmosphere through Emission Point 0466-0 and shall record the output of the system.
 - i. The system shall be designed to meet the specifications and test procedures for SO₂ continuous emission monitoring systems in stationary sources described in 40 CFR

- Part 60, Appendix B, Performance Specification 2 (PS2).
- ii. The system shall also meet the specifications and test procedures for continuously monitoring the SO₂ emission rate described in 40 CFR Part 60, Appendix B, Performance Specification 6 (PS6).
 - iii. The owner or operator shall conduct quality assurance and quality control of the system by following the applicable quality assurance and quality control procedures described in 40 CFR Part 60, Appendix F (*Quality Assurance Procedures*).
- C. The owner or operator shall continuously demonstrate compliance with the nitrogen oxides (NO_x) limits in this permit through the use of a Continuous Emission Monitoring System (CEMS). As a result, the owner or operator shall install, calibrate, maintain, and operate a CEMS for measuring NO_x emissions discharged to the atmosphere through Emission Point 0466-0 and shall record the output of the system.
- i. The system shall be designed to meet the specifications and test procedures for NO_x continuous emission monitoring systems in stationary sources described in 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2).
 - ii. The system shall also meet the specifications and test procedures for continuously monitoring the NO_x emission rate described in 40 CFR Part 60, Appendix B, Performance Specification 6 (PS6).
 - iii. The owner or operator shall conduct quality assurance and quality control of the system by following the applicable quality assurance and quality control procedures described in 40 CFR Part 60, Appendix F (*Quality Assurance Procedures*).
- 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.
- i. 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.
- E. The owner or operator shall ensure that the SO₂ CEMS and the NO_x CEMS comply with the following requirements:
- i. Each CEMS shall operate at all times, except for CEM breakdowns, repairs, calibration checks, and zero span adjustments.
 - ii. The 1-hour average SO₂ emission rate and the 1-hour average NO_x emission rate measured by the respective CEMS shall be used to demonstrate compliance with the emission limits in this permit. At least two (2) data points shall be used to calculate each 1-hour average emission rate.
 - iii. For each hour of missing emission data (SO₂ or NO_x), the owner or operator shall substitute data as follows:

1.If the monitor data availability is equal to or greater than 95.0 percent, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:

- a) For the missing data period less than or equal to twenty-four (24) hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
- b) For a missing data period greater than twenty-four (24) hours, substitute the greater of:
 - i. The 90th percentile hourly concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or
 - ii. The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

2.If the monitor data availability is at least 90.0 percent by less than 95.0 percent, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:

- a) For a missing data period of less than or equal to eight (8) hours, substitute the average of the hourly concentrations recorded by the pollutant concentration monitor for the hour before and the hour after the missing data period.
- b) For the missing data period of more than eight (8) hours, substitute the greater of:
 - i. The 95th percentile hourly pollutant concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or
 - ii. The average of the hourly concentrations recorded by the pollutant concentration monitor for the hour before and the hour after the missing data period.

3.If the monitor data availability is less than 90.0 percent, the owner or operator shall obtain actual emission data by an alternate testing or monitoring method approved by the Department.

Authority for Requirement - DNR Construction Permit 99-A-579-P9

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: 0499-0

Associated Equipment

Associated Emission Unit ID Numbers: 0499-1-F

Emission Unit vented through this Emission Point: 0499-1-F

Emission Unit Description: 20,000 gal Fuel Oil Tank

Raw Material/Fuel: Fuel Oil

Rated Capacity: 2,400 gal/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 98-A-1055-S1
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 (PM)

Emission Limits: 0.1 gr/scf

Authority for Requirement: DNR Construction Permit 98-A-1055-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:

A. The storage tank is limited to storing distillate fuel oil.

Reporting & Record keeping

All records, as required by this permit, shall be kept on site for a minimum of five (5) years and be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The records shall show the following

A. The type of fuel stored in the tank.

B. Records showing the dimensions of the storage vessel and the capacity.

Authority for Requirement: DNR Construction Permit 98-A-1055-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Source: Storage Tank

Tank Shell Diameter: 11 ft

Tank Shell Height: 28 ft

Tank Volume (Gallons): 20,000

Exhaust Flow Rate: Fugitive

Authority for Requirement: DNR Construction Permit 98-A-1055-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 0535-0

Associated Equipment

Associated Emission Unit ID Numbers: 0535-1
Emissions Control Equipment ID Number: 0535-C
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: 0535-1
Emission Unit Description: CKD Handling Silo
Raw Material/Fuel: CKD
Rated Capacity: 405 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: DNR Construction Permit 97-A-789-S2
567 IAC 23.3(2)"d"

⁽¹⁾ If opacity greater than that observed in the initial performance test is viewed other than startup, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: Particulate Matter (PM₁₀)
Emission Limits: 0.55 lb/hr
Authority for Requirement: DNR Construction Permit 97-A-789-S2

Pollutant: Particulate Matter (PM)
Emission Limits: 0.1 gr/scf
Authority for Requirement: DNR Construction Permit 97-A-789-S2
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, (inches, dia.): 16 x 7

Exhaust Flow Rate (scfm): 2,900

Exhaust Temperature (°F): 140

Discharge Style: Unobstructed Vertical

Authority for Requirement: DNR Construction Permit 97-A-789-S2

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

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic 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: 0611-0

Associated Equipment

Associated Emission Unit ID Number: 0611-1
Emissions Control Equipment ID Number: 0611-C
Emissions Control Equipment Description: Baghouse
Continuous Emissions Monitors ID Number: 0611-1-M

Emission Unit vented through this Emission Point: 0611-1
Emission Unit Description: Clinker Cooler
Raw Material/Fuel: Clinker
Rated Capacity: 145.3 tons of clinker/hr

Applicable Requirements

BACT 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%⁽¹⁾
Authority for Requirement: DNR Construction Permit 01-A-878-P1

⁽¹⁾ The averaging period for this standard is one (1) hour.

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 0.015 gr/dscf
Authority for Requirement: DNR Construction Permit 01-A-878-P1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.015 gr/dscf
Authority for Requirement: DNR Construction Permit 01-A-878-P1

Other 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%⁽²⁾
Authority for Requirement: DNR Construction Permit 01-A-878-P1
567 IAC 23.3(2)"d"

⁽²⁾ 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 (PM₁₀)

Emission Limit(s): 17.92 lb/hr ⁽³⁾

Authority for Requirement: DNR Construction Permit 01-A-878-P1

⁽³⁾ Emission rate used in the facility-wide SIP (State Implementation Plan) maintenance plan dispersion modeling to demonstrate no exceedences of the National Ambient Air Quality Standards (NAAQS).

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.07 lb/ton clinker

Authority for Requirement: 40 CFR 63.1343
567 IAC 23.1(4)"bl"

NSPS and NESHAP

Both the emission unit and the source (plant number 82-04-005) are subject to Subpart A (*General Provisions*; 40 CFR §60.1 through 40 CFR §60.19) of the New Source Performance Standards (NSPS) and Subpart A (*General Provisions*; 40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories.

This source (plant number 82-04-005) is subject to Subpart LLL (*National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry*; 40 CFR §63.1340 – 40 CFR §63.1358). Please note that EPA amended NESHAP Subpart LLL on February 12, 2013 and the source (plant number 82-04-005) may be subject to requirements in those amendments.

An O & M plan is required by Subpart LLL for these emission units. Relevant requirements of O & M plan for this equipment: Particulate Matter and Opacity-**see Appendix B.**

This emission unit is an affected facility per NSPS Subpart F (*Standards of Performance for Portland Cement Plants*; 40 CFR §60.60 through 40 CFR §60.66). Per 40 CFR §63.1356, any affected source subject to the provisions of NESHAP Subpart LLL is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart F. Please note that EPA amended NSPS Subpart F on February 12, 2013 and this emission unit may be subject to requirements in those amendments.

Authority for Requirements: DNR Construction Permit 01-A-878-P1

40 CFR 60 Subpart F

567 IAC 23.1(2)"c"

40 CFR 63 Subpart LLL

567 IAC 23.1(4)"bl"

Operational Limits & Requirements

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

- A. The owner or operator shall schedule a PM₁₀ compliance test within thirty (30) days if this emission point exceeds the 5% (1- hour averaging period) BACT opacity limit.

Reporting & Record keeping

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

- A. A log of:
- One (1) hour opacity averages,
 - Dates and times of any exceedances, and
 - Dates of any PM₁₀ compliance tests.
- B. A copy of all PM CPMS and corresponding opacity test results if a PM CPMS is used for compliance.
- C. Monitoring for NESHAP Subpart LLL at the facility (plant number 82-04-005) shall be done in accordance with 40 CFR §63.1350.
- D. Recordkeeping for NESHAP Subpart LLL at the facility (plant number 82-04-005) shall be done in accordance with 40 CFR §63.1355.

Authority for Requirement: DNR Construction Permit 01-A-878-P1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 113

Stack Opening, (inches, dia.): 126

Exhaust Flow Rate (scfm): 133,000

Exhaust Temperature (°F): 340

Discharge Style: Unobstructed Vertical

Authority for Requirement: DNR Construction Permit 01-A-878-P1

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

Monitoring Requirements

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

Continuous Emissions Monitoring:

A. The following monitoring systems are required to demonstrate compliance with the NSPS, NESHAP, and Best Available Control Technology (BACT) requirements listed in this permit:

○ *Opacity:*

In order to demonstrate compliance with the applicable opacity standards the owner or operator shall either:

1. Install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system. The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 1 (PS1).
And/or
2. Install, calibrate, maintain, and operate a continuous parametric monitoring system for particulate matter (PM CPMS). The owner or operator shall conduct Method 9 opacity testing annually to establish a correlation between the PM CPMS milliamp (mA) output and opacity from the stack (EP 0611-0). The PM CPMS shall provide a 4 – 20 mA output. The PM CPMS operating range must be capable of reading PM concentrations from zero (0) to a level equivalent to three (3) times the allowable emission limit.

Authority for Requirement – DNR Construction Permit 01-A-878-P1
40 CFR 63 Subpart LLL
567 IAC 23.1(3)"bl

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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Facility Maintained Operation & Maintenance Plan Required?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Compliance Assurance Monitoring (CAM) Plan Required?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

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 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: 0667-0

Associated Equipment

Associated Emission Unit ID Numbers: 0667-1, 0667-2

Emissions Control Equipment ID Number: 0667-C

Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: 0667-1

Emission Unit Description: Coal Mill and Bins

Raw Material/Fuel: Coal

Rated Capacity: 20 tons/hr

Emission Unit vented through this Emission Point: 0667-2

Emission Unit Description: Coal Mill Air Heater

Raw Material/Fuel: Natural Gas

Rated Capacity: 0.01 MMcf/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%⁽¹⁾

Authority for Requirement: DNR Construction Permit 78-A-232-S3

567 IAC 23.1(2)"v"

40 CFR 60.252(c)

⁽¹⁾ If opacity greater than that observed in the initial performance test is viewed other than startup, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: Particulate Matter (PM₁₀)

Emission Limits: 5.76 lb/hr

Authority for Requirement: DNR Construction Permit 78-A-232-S3

Pollutant: Particulate Matter (PM)

Emission Limits: 0.1 gr/scf

Authority for Requirement: DNR Construction Permit 78-A-232-S3

567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

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

NSPS and NESHAP

This unit is subject to Subpart A (General Provisions) and Subpart Y- *Standards of Performance for Coal preparation Plants of the New Source Performance Standards (NSPS)*.

Authority for Requirement: 40 CFR 60 Subpart Y
567 IAC 23.1(2)"v"

The Coal Mill Air Heater is subject to National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63 Subpart DDDDD], and 40 CFR Part 63 Subpart A, General Provisions.

Authority for Requirement: 40 CFR 63 Subpart DDDDD

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 113

Stack Opening, (inches, dia.): 11 x 14

Exhaust Flow Rate (scfm): 29,000

Exhaust Temperature (°F): 140

Discharge Style: Unobstructed Vertical

Authority for Requirement: DNR Construction Permit 78-A-232-S3

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

Monitoring Requirements

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

Facility Periodic Opacity Monitoring

On a weekly basis, the facility will have a certified smoke reader conduct a Method 22 visible emissions check on the Coal Mill building. If there are visible emissions, the smoke reader will conduct a standard EPA Method 9 observation. If an opacity $\geq 20\%$ is observed, it would be considered a violation and corrective action will be taken as soon as possible, but no later than eight hours from the time of 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 two-hour intervals throughout the day. If all observation tests for the week have been unsuccessful due to weather, an observation shall be made the next operating day when weather permits.

All opacity observations and any resulting actions shall be recorded and the records maintained for a minimum of five years.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☒ No ☐
See Appendix C

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 0684-0

Associated Equipment

Associated Emission Unit ID Numbers: 0684-1
Emissions Control Equipment ID Number: 0684-C
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: 0684-1
Emission Unit Description: Coal Silo
Raw Material/Fuel: Coal
Rated Capacity: 200 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%⁽¹⁾
Authority for Requirement: DNR Construction Permit 78-A-248-S6
567 IAC 23.1(2)"v"
40 CFR 60.252(c)

⁽¹⁾ If opacity greater than that observed in the initial performance test is viewed other than startup, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: Particulate Matter (PM₁₀)
Emission Limits: 0.67 lb/hr
Authority for Requirement: DNR Construction Permit 78-A-248-S6

Pollutant: Particulate Matter
Emission Limits: 0.1 gr/scf
Authority for Requirement: DNR Construction Permit 78-A-248-S6
567 IAC 23.3(2)"a"

NSPS and NESHAP

This unit is subject to Subpart A (General Provisions) and Subpart Y- *Standards of Performance for Coal preparation Plants of the New Source Performance Standards (NSPS)*.

Authority for Requirement: 40 CFR 60 Subpart Y
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): 142

Stack Opening, (inches, dia.): 12 x 21

Exhaust Flow Rate (scfm): 4,000

Exhaust Temperature (°F): 70

Discharge Style: Unobstructed Vertical

Authority for Requirement: DNR Construction Permit 78-A-248-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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Facility Periodic Opacity Monitoring

On a weekly basis, the facility will have a certified smoke reader conduct a Method 22 visible emissions check on the coal silo. If there are visible emissions, the smoke reader will conduct a standard EPA Method 9 observation. If an opacity $\geq 20\%$ is observed, it would be considered a violation and corrective action will be taken as soon as possible, but no later than eight hours from the time of 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 two-hour intervals throughout the day. If all observation tests for the week have been unsuccessful due to weather, an observation shall be made the next operating day when weather permits.

All opacity observations and any resulting actions shall be recorded and the records maintained for a minimum of five years.

Authority for Requirement: 567 IAC 22.108(14)

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: 0684-0-F

Associated Equipment

Associated Emission Unit ID Numbers: 0684-1-F

Emission Unit vented through this Emission Point: 0684-1-F

Emission Unit Description: Belt transfer to coal silo

Raw Material/Fuel: Coal

Rated Capacity: 200 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: 567 IAC 23.1(2)"v"
40 CFR 60.252(c)

NSPS and NESHAP

This unit is subject to Subpart A (General Provisions) and Subpart Y- *Standards of Performance for Coal preparation Plants of the New Source Performance Standards (NSPS)*.

Authority for Requirement: 40 CFR 60 Subpart Y
567 IAC 23.1(2)"v"

Monitoring Requirements

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

Periodic Opacity Monitoring

On a weekly basis, the facility will have a certified smoke reader conduct a Method 22 visible emissions check on the belt transfer of coal to the coal silo. If there are visible emissions, the smoke reader will conduct a standard EPA Method 9 observation. If an opacity $\geq 20\%$ is observed, it would be considered a violation and corrective action will be taken as soon as possible, but no later than eight hours from the time of 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 two-hour intervals throughout the day. If all observation tests for the week have been unsuccessful due to weather, an observation shall be made the next operating day when weather permits.

All opacity observations and any resulting actions shall be recorded and the records maintained for a minimum of five years.

Authority for Requirement: 567 IAC 22.108(14)

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: 0690-0-F

Associated Equipment

Associated Emission Unit ID Numbers: 0690-3-F

Emission Unit vented through this Emission Point: 0690-3-F

Emission Unit Description: Hopper/Weigh Feeder

Raw Material/Fuel: Coal

Rated Capacity: 200 tons/hr

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.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 96-A-645-S3
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedence of the indicator opacity of 20% 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: Particulate Matter (PM₁₀)

Emission Limits: 0.95 lb/hr and 0.52 tons/yr

Authority for Requirement: DNR Construction Permit 96-A-645-S3

Pollutant: Particulate Matter (PM)

Emission Limits: 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:

- A. The transfer of coal associated with this source (EU SO690-3F) shall not exceed the rate of 200 tons per hour.
- B. The transfer of coal associated with this source (EU SO690-3F) shall not exceed the rate of 600 tons per day.

Reporting & Record keeping

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

- A. A log shall be kept showing the date, the amount of coal (in tons/day) transfer associated with source 0690-4-F on that date, the total hours (in hrs/day) of operation for source 0690-3-F on that date, and the average rate (in tons/hr) of coal transfer for source 0690-3-F for that day.

Authority for Requirement: DNR Construction Permit 96-A-645-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): N/A

Stack Opening, (inches, dia.): N/A

Exhaust Flow Rate (scfm): N/A

Exhaust Temperature (°F): Ambient

Discharge Style: N/A

Authority for Requirement: DNR Construction Permit 96-A-645-S3

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 1310-0

Associated Equipment

Associated Emission Unit ID Numbers: 1310-1
Emissions Control Equipment ID Number: 1310-C
Emissions Control Equipment Description: Mobile Industrial Vacuum

Emission Unit vented through this Emission Point: 1310-1
Emission Unit Description: Pavement Cleaning
Raw Material/Fuel: Dust
Rated Capacity: 15 tons/hr

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.

Pollutant: Opacity
Emission Limit(s): 40%⁽¹⁾
Authority for Requirement: DNR Construction Permit 86-A-084-S1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedence of the indicator opacity of 10% 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: Particulate Matter (PM₁₀)
Emission Limits: 0.06 lb/hr
Authority for Requirement: DNR Construction Permit 86-A-084-S1

Pollutant: Particulate Matter (PM)
Emission Limits: 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 86-A-084-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): 8
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 2,300
Exhaust Temperature (°F): 70
Discharge Style: Unobstructed Vertical
Authority for Requirement: DNR Construction Permit 85-A-084-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 1320-0

Associated Equipment

Associated Emission Unit ID Numbers: 1320-1

Emissions Control Equipment ID Number: 1320-C

Emissions Control Equipment Description: Mobile Industrial Vacuum

Emission Unit vented through this Emission Point: 1320-1

Emission Unit Description: Pavement Cleaning

Raw Material/Fuel: Dust

Rated Capacity: 15 tons/hr

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.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 86-A-085-S1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedence of the indicator opacity of 10% 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: Particulate Matter (PM₁₀)

Emission Limits: 0.06 lb/hr

Authority for Requirement: DNR Construction Permit 86-A-085-S1

Pollutant: Particulate Matter (PM)

Emission Limits: 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 86-A-085-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): 8
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 2,300
Exhaust Temperature (°F): 70
Discharge Style: Unobstructed Vertical
Authority for Requirement: DNR Construction Permit 86-A-085-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 1510-0-F, 1520-0-F, & 1530-0-F

Associated Equipment

EP ID	EU ID	Emission Unit Description	Maximum Design Capacity	CE Description and ID	Permit Number
1510-0-F	1510-1-F	Clinker in Silo is loaded onto Truck	320 tons/hour, clinker	Best Management Practices (BMP)	19-A-712
1520-0-F	1520-1-F	Clinker is unloaded from Truck onto Stage Area near Barge	320 tons/hour, clinker	Best Management Practices (BMP)	19-A-713
1530-0-F	1530-1-F	Clinker is loaded onto Barge using an Excavator with Clam Shell Bucket	250 tons/hour, clinker	Best Management Practices (BMP)	19-A-714

Raw Material/Fuel: Clinker

Applicable Requirements

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

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

Combined Emission Limits

Pollutant: Opacity

Emission Limit(s): The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dust beyond the lot line of the property

Authority for Requirement: DNR Construction Permits listed in Table

Emission Limits for EP 1510-0-F

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.24 lbs/day

Authority for Requirement: DNR Construction Permit 19-A-712

Emission Limits for EP 1520-0-F

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.08 lbs/day

Authority for Requirement: DNR Construction Permit 19-A-713

Emission Limits for EP 1530-0-F

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 2.80 lbs/day

Authority for Requirement: DNR Construction Permit 19-A-714

Operational Limits & Requirements

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

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

CLINKER BARGE LOADING OPERATION REQUIREMENTS

- A. The Clinker Barge Loading Operation is restricted to March through November, between the hours of 9 AM to 5 PM, Monday through Friday.
 - a. The owner or operator shall keep a daily log indicating the date, start time, end time, and day of the week that clinker barge loading took place at the facility.
- B. The amount of clinker loaded onto a barge shall be limited to no more than 2,000 tons per day and 25,000 tons per 12-month rolling period.
 - a. The owner or operator shall record the amount, in tons, of clinker that is loaded onto a barge on a daily basis and on a monthly basis.
 - b. The owner or operator shall calculate and record the amount, in tons, of clinker that is loaded onto a barge on a 12-month rolling basis.
- C. The owner or operator shall develop a written plan describing Best Management Practices (BMP) and any associated monitoring and recordkeeping activities to minimize uncaptured and fugitive emissions from clinker truck loading (1510-0-F), clinker unloading/staging (1520-0-F), and clinker barge loading (1530-0-F).
- D. The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.
- E. The owner or operator shall implement the Best Management Practices (BMP) and associated monitoring and recordkeeping activities as described in the written plan within 15 days after the Clinker Barge Loading Operation begins.

Authority for Requirement: DNR Construction Permits listed in Table

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

The emission units that are part of the Clinker Barge Loading Operation do not exhaust through a physical stack.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

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

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

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

G1. Duty to Comply

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

G2. Permit Expiration

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

G3. Certification Requirement for Title V Related Documents

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

G4. Annual Compliance Certification

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

G5. Semi-Annual Monitoring Report

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

G6. Annual Fee

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

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

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

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information

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

G9. General Maintenance and Repair Duties

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

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

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
 - a. The date, place and time of sampling or measurements
 - b. The date the analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses; and
 - f. The operating conditions as existing at the time of sampling or measurement.
 - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
 - a. Comply with all terms and conditions of this permit specific to each alternative scenario.
 - b. Maintain a log at the permitted facility of the scenario under which it is operating.
 - c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

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

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

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

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

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

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

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

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

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

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures.

Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is

eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:

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

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

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 24.1(1)-567 IAC 24.1(4)

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

technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

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

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

G15. Permit Deviation Reporting Requirements

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

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

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

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

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

- a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
- b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
- c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
- d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));.
- e. The changes comply with all applicable requirements.
- f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written

notification, including the following, which must be attached to the permit by the source, the department and the administrator:

- i. A brief description of the change within the permitted facility,
- ii. The date on which the change will occur,
- iii. Any change in emission as a result of that change,
- iv. The pollutants emitted subject to the emissions trade
- v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
- vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
- vii. Any permit term or condition no longer applicable as a result of the change.

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 or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program.
- 40 CFR part 82*

G24. Permit Reopenings

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

of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

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

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

G25. Permit Shield

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

a. Such applicable requirements are included and are specifically identified in the permit; or

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

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

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

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;

d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

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

G27. Property Rights

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

G28. Transferability

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

G29. Disclaimer

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

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

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

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

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

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

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

G32. Contacts List

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

Iowa Compliance Officer
Air Branch
Enforcement and Compliance Assurance Division
U.S. EPA Region 7
11201 Renner Blvd.
Lenexa, KS 66219
(913) 551-7020

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

Chief, Air Quality Bureau
Iowa Department of Natural Resources
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-8200

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

Field Office 1

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

Field Office 2

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

Field Office 3

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

Field Office 4

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

Field Office 5

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

Field Office 6

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

Polk County Public Works Dept.

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

Linn County Public Health

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

Appendix A: Administrative Consent Order # 98-AQ-08

Appendix B : Operation and Maintenance Plans

Appendix C : Compliance Assurance Monitoring Plans

CAM Plan for 0218-1, 0218-0 and 0218-C Baghouse

Emissions Unit

Emission Unit: Primary Crusher (0218-1)
Facility: Continental Cement Company
Pollutant: Opacity, PM₁₀ & PM
Emission Control Technique: Baghouse
Control Device Identification Number: 0218-C
Emission Egress Point Identification Number: 0218-0

Applicable Requirements:

Pollutant: PM₁₀
Emission Limit(s): 5.59 lb/hr
Authority for Requirement: DNR Construction Permit 78-A-218-S7

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 78-A-218-S7
567 IAC 23.3(2)"a"

Monitoring Approach:

Applicable Requirements	PM Limits	Opacity
General Monitoring Approach	Pressure drop readings	Visible emissions observations
Daily	Check dust collector differential Pressure	
Weekly		Method 22 visible emissions observations are performed to ensure no visible emissions during the material handling operations of this unit
Monthly		Inspect cleaning sequence, air delivery system, and hopper functions to insure equipment is operating properly.
Quarterly		Inspect bags for leaks and wear.
Semi-Annually		All baghouse components are inspected every 6 months to insure proper operation.

Applicable Requirements	PM Limits	Opacity
Indicator Range/Source	Pressure Range: 4 to 5 inches of water column.	Presence of visible emissions.
Data Collection Frequency	Daily: Pressure range observations Quarterly and Semiannually: Equipment inspections.	Monthly: Visible emissions observations. Quarterly and Semiannually: Equipment inspections.

Recordkeeping	<p>Daily logs of differential pressure readings.</p> <p>Weekly logs of emissions observations.</p> <p>All daily, monthly, and quarterly and semi-annually required inspections and maintenance. The date, time and the location of the bag in relationship to the other bags must document bag replacement.</p> <p>All corrective actions resulting from compliance indicators and inspections and maintenance.</p> <p>Excursion, indicator opacity exceedence, and excess emissions reports.</p> <p>Maintenance and inspection records will be kept for at least five (5) years and be available to the IDNR upon request.</p>
QA/QC	<p>The baghouse and monitoring equipment will be operated and maintained according to manufacturer's recommendations and/or as outlined in the above requirements.</p> <p>Continental Cement Company will maintain an adequate inventory of spare parts.</p> <p>Visible emissions observer trainer per Method 22.</p>

CAM Plan for 0667-1, 0667-0 and 0667-C Baghouse

Emissions Unit

Emission Unit: Coal Mill (0667-1)
Facility: Continental Cement Company
Pollutant: Opacity, PM₁₀ & PM
Emission Control Technique: Baghouse
Control Device Identification Number: 0667-C
Emission Egress Point Identification Number: 0667-0

Applicable Requirements:

Pollutant: PM₁₀
Emission Limit(s): 5.76 lb/hr
Authority for Requirement: DNR Construction Permit 78-A-232-S3

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 78-A-232-S3
567 IAC 23.3(2)"a"

Monitoring Approach:

Applicable Requirements	PM Limits	Opacity
General Monitoring Approach	Pressure drop readings	Visible emissions observations
Daily	Check dust collector differential Pressure	
Weekly		Method 22 visible emissions observations are performed to ensure no visible emissions during the material handling operations of this unit
Monthly		Inspect cleaning sequence, air delivery system, and hopper functions to insure equipment is operating properly.
Quarterly		Inspect bags for leaks and wear.
Semi-Annually		All baghouse components are inspected every 6 months to insure proper operation.

Applicable Requirements	PM Limits	Opacity
Indicator Range/Source	Pressure Range: 4 to 5 inches of water column.	Presence of visible emissions.
Data Collection Frequency	Daily: Pressure range observations Quarterly and Semiannually: Equipment inspections.	Monthly: Visible emissions observations. Quarterly and Semiannually: Equipment inspections.

Recordkeeping	<p>Daily logs of differential pressure readings.</p> <p>Weekly logs of emissions observations.</p> <p>All daily, monthly, and quarterly and semi-annually required inspections and maintenance. The date, time and the location of the bag in relationship to the other bags must document bag replacement.</p> <p>All corrective actions resulting from compliance indicators and inspections and maintenance.</p> <p>Excursion, indicator opacity exceedence, and excess emissions reports.</p> <p>Maintenance and inspection records will be kept for at least five (5) years and be available to the IDNR upon request.</p>
QA/QC	<p>The baghouse and monitoring equipment will be operated and maintained according to manufacturer's recommendations and/or as outlined in the above requirements.</p> <p>Continental Cement Company will maintain an adequate inventory of spare parts.</p> <p>Visible emissions observer trainer per Method 22.</p>

Appendix D: 40 CFR Part 60 Subpart DDDD Emission Limitations and Compliance Demonstration Methods

Table 8 to Subpart DDDD of Part 60—Model Rule—Emission Limitations That Apply to Waste-Burning Kilns After May 20, 2011 [Date to be specified in state plan.]¹

For the air pollutant	You must meet this emission limitation²	Using this averaging time	And determining compliance using this method⁴
Cadmium	0.0014 milligrams per dry standard cubic meter ³	3-run average (collect a minimum volume of 29 dry standard cubic meters)	Performance test (Method 29 at 40 CFR part 60, appendix A-8).
Carbon monoxide	110 (long kilns)/790 (preheater/precalciner) parts per million dry volume	3-run average (1 hour minimum sample time per run)	Performance test (Method 10 at 40 CFR part 60, appendix A-4).
Dioxins/furans (total mass basis)	1.3 nanograms per dry standard cubic meter	3-run average (collect a minimum volume of 23 dry standard cubic meters)	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Dioxins/furans (toxic equivalency basis)	0.075 nanograms per dry standard cubic meter ³	3-run average (collect a minimum volume of 23 dry standard cubic meters)	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Hydrogen chloride	3.0 parts per million dry volume ³	3-run average (collect a minimum volume of 321 dry standard cubic meter) or 30-day rolling average if HCl CEMS is being used	Performance test (Method 321 at 40 CFR part 63, appendix A of this part) or HCl CEMS if a wet scrubber or dry scrubber is not used, as specified in §60.2710(j).
Lead	0.014 milligrams per dry standard cubic meter ³	3-run average (collect a minimum volume of 29 dry standard cubic meters)	Performance test (Method 29 at 40 CFR part 60, appendix A-8).
Mercury	0.011 milligrams per dry standard cubic meter	30-day rolling average	Mercury CEMS or sorbent trap monitoring system (performance specification 12A or 12B, respectively, of appendix B of this part), as specified in §60.2710(j).
Oxides of nitrogen	630 parts per million dry volume	3-run average (for Method 7E, 1 hour	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A-4).

		minimum sample time per run)	
Particulate matter filterable	13.5 milligrams per dry standard cubic meter	30-day rolling average	PM CPMS (as specified in §60.2710(x)).
Sulfur dioxide	600 parts per million dry volume	3-run average (for Method 6, collect a minimum of 20 liters; for Method 6C, 1 hour minimum sample time per run)	Performance test (Method 6 or 6c at 40 CFR part 60, appendix A-4).

¹The date specified in the state plan can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018.

²All emission limitations are measured at 7 percent oxygen (except for CEMS data during startup and shutdown), dry basis at standard conditions. For dioxins/furans, you must meet either the total mass basis limit or the toxic equivalency basis limit.

³If you are conducting stack tests to demonstrate compliance and your performance tests for this pollutant for at least 2 consecutive years show that your emissions are at or below this limit, you can skip testing according to §60.2720 if all of the other provisions of §60.2720 are met. For all other pollutants that do not contain a footnote “3”, your performance tests for this pollutant for at least 2 consecutive years must show that your emissions are at or below 75 percent of this limit in order to qualify for skip testing, with the exception of annual performance tests to certify a CEMS or PM CPMS.

⁴Alkali bypass and in-line coal mill stacks are subject to performance testing only, as specified in 60.2710(y)(3). They are not be subject to the CEMS, sorbent trap or CPMS requirements that otherwise may apply to the main kiln exhaust.

Appendix E: Weblinks to Standards

- A. 40 CFR Part 60 Subpart A-*General Provisions*
[http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.7.60.a\]](http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.7.60.a)
- B. 40 CFR Part 60 Subpart F-Standards of Performance for *Portland Cement Plants*
<http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.7.60.f>
- C. 40 CFR Part 60 Subpart Y-Standards of Performance for *Coal Preparation Plants*
<http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.7.60.y>
- D. 40 CFR Part 60 Subpart DDDD–Standards of Performance for *Commercial and Industrial Solid Waste Incineration Units that Commenced Construction on or before November 30, 1999*
<http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.7.60.dddd>
- F. 40 CFR Part 61 Subpart E - National Emission Standards for Hazardous Air Pollutants for *Mercury*
<https://www.ecfr.gov/cgi-bin/text-idx?SID=b24e38c2e97db4baec982828e8929d3a&mc=true&node=sp40.10.61.e&rgn=div6>
- G. 40 CFR Part 63 Subpart A-*General Provisions*
<http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.10.63.a>
- H. 40 CFR Part 63 Subpart LLL-National Emission Standards for Hazardous Air Pollutants from the *Portland Cement Manufacturing Industry*
<http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.12.63.lll>
- I. 40 CFR Part 63 Subpart ZZZZ-National Emission Standards for Hazardous Air Pollutants for *Stationary Reciprocating Internal Combustion Engines*
<http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.14.63.zzzz>
- J. 40 CFR Part 63 Subpart DDDDD- National Emission Standards for Hazardous Air Pollutants for *Industrial, Commercial, And Institutional Boilers and Process Heaters*
<https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=&mc=true&r=PART&n=pt40.15.63#sp40.15.63.ddddd>