

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

**Name of Permitted Facility: Linwood Mining & Minerals
Corporation**

Facility Location: 401 East Front Street, Davenport, Iowa 52804

Air Quality Operating Permit Number: 04-TV-005R3

Expiration Date: **DATE**

Permit Renewal Application Deadline: **DATE**

EIQ Number: 92-3207

Facility File Number: 82-01-015

Responsible Official

Name: Darin Osland

Title: Environmental Manager

Mailing Address: 401 East Front Street, Davenport, Iowa 52804

Phone #: 563-324-1931, ex. 1140

Email: dosland@linwoodmining.com

Permit Contact Person for the Facility

Name: Darin Osland

Title: Environmental Manager

Mailing Address: 401 East Front Street, Davenport, Iowa 52804

Phone #: 563-324-1931, ex. 1140

Email: dosland@linwoodmining.com

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 24, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Marnie Stein, Supervisor of Air Operating Permits Section

Date

Table of Contents

I. Facility Description and Equipment List	4
II. Plant - Wide Conditions.....	8
III. Emission Point Specific Conditions	11
IV. General Conditions.....	111
G1. Duty to Comply	
G2. Permit Expiration	
G3. Certification Requirement for Title V Related Documents	
G4. Annual Compliance Certification	
G5. Semi-Annual Monitoring Report	
G6. Annual Fee	
G7. Inspection of Premises, Records, Equipment, Methods and Discharges	
G8. Duty to Provide Information	
G9. General Maintenance and Repair Duties	
G10. Recordkeeping Requirements for Compliance Monitoring	
G11. Evidence used in establishing that a violation has or is occurring.	
G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification	
G13. Hazardous Release	
G14. Excess Emissions and Excess Emissions Reporting Requirements	
G15. Permit Deviation Reporting Requirements	
G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations	
G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification	
G18. Duty to Modify a Title V Permit	
G19. Duty to Obtain Construction Permits	
G20. Asbestos	
G21. Open Burning	
G22. Acid Rain (Title IV) Emissions Allowances	
G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements	
G24. Permit Reopenings	
G25. Permit Shield	
G26. Severability	
G27. Property Rights	
G28. Transferability	
G29. Disclaimer	
G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification	
G31. Prevention of Air Pollution Emergency Episodes	
G32. Contacts List	

V. Appendix A: Administrative Consent Order NO. 98-AQ-7.....	125
Appendix B: NSPS and NESHAP Links.....	126
Appendix C: Executive Order 10 (EO10) Rules Crosswalk.....	127

Abbreviations

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

Pollutants

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

I. Facility Description and Equipment List

Facility Name: Linwood Mining and Minerals Corporation

Permit Number: 04-TV-005R3

Facility Description: Crushed and Broken Limestone (SIC 1422)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
BL01	BL01	East Barge Loadout	02-A-168-S3
BL02	BL02	West Barge Loadout	02-A-169-S3
CC-1	CC-1a	Old Mill (Dryer)	71-A-084-S12
	CC-1b	Old Mill (Cage Mill)	
	CC-1c	Old Mill (Screen)	
	CC-1d	Old Mill (Screen)	
	CC-1e	Old Mill (Separator)	
	CC-1f	Old Mill (Separator)	
	CC-1g	Old Mill (Conveyors/Screws/Elevators)	
	CC-1h	Old Mill (Finished Storage Tank)	
	CC-1i	Old Mill (Finished Storage Tank)	
	CC-1j	Storage Bin	
	CC-1k	Storage Bin	
	CC-1l	Storage Bin	
	CC-1m	Storage Bin	
	CC-13	South Tank	
	CC-12	North Tank	
CC-1r	#3 Loadout System		
CC-2	CC-2b	New Mill (Hammermill 1)	86-A-049-S9
	CC-2c	New Mill (Hammermill 2)	
	CC-2d	New Mill (Separator 18')	
	CC-2e	New Mill (Screen)	
	CC-2f	New Mill (Screen)	
	CC-2g	New Mill (Screen)	
	CC-2h	New Mill (Screen)	
	CC-2i	New Mill (Raymond Mill)	
	CC-2k	New Mill (Conveyors/Screws/Elevators)	
CC-3	CC-3	Calcium Railcar Loadout	88-A-218-S6
	CC-3A	North/South Belt	
	CC-3B	East/West Belt	
	CC-3C	Calcium Truck Loadout	
CC-5	CC-2a	New Mill (Dryer)	98-A-846-S2
	CC-2k	New Mill (Conveyors/Screws/Elevators)	
CC-16	CC-16	Long Conveyor	17-A-488-S3
	CC-17	Granular Bin #1	
	CC-18	Granular Bin #2	

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
CC-16	CC-19	Transfer Belt to Long Conveyor	17-A-488-S3
HR-U	HR-U	Unpaved Haul Roads	18-A-108-S1
HR-P	HR-P	Paved Haul Roads	18-A-109-S1
Storage Piles	Pile 2	Pile 2	18-A-110-S1
	Pile 3	Pile 3	
	Pile 5	Pile 5	
	Pile 10	Pile 10	
	Pile 12	Pile 12	
	Pile 13	Pile 13	
	Pile 15	Pile 15	
	Pile 16	Pile 16	
	Pile 17	Pile 17	
	Pile 18	Pile 18	
LP-4	EU K-3	Rotary Lime Kiln 3	73-A-219-S9
LP-40	EU K-4	Rotary Lime Kiln 4 (225 MMBtu/hour)	23-A-169
	EU LP-41	Elevator 431	
	EU LP-42	Conveyor 446	
	EU LP-50	West Kiln Run Tank	
	EU LP-51	East Kiln Run Tank	
LP-7	LP-7	Kiln Dust Tank and Loadout	88-A-220-S5
LP-8	LP-8a	Tank 445	88-A-221-S10
	LP-8b	Tank 446	
	LP-8c	Tank 447	
	LP-8d	Crusher	
	LP-8e	Screen	
	LP-8f	Briquetter	
	LP-8g	Pneumatic Blower	
	LP-8h	Tank 441	
	LP-8i	Scale #1 Loadout System	
	LP-8j	Tank 446B	
LP-12	LP-12a	Hi-Cal Storage Bin	97-A-1084-S4
	LP-12b	Pneumatic Blower	
	LP-12c	Hi-Cal Storage Bin	
	LP-12e	Flourspar Storage Bin	
	LP-12f	Cal-Aluminate Storage Bin	
	LP-12g	Hi-Cal Storage Bin	
LP-13	LP-13	Lime Rail Loadout System (Spout and Belt #1)	02-A-028-S5
	LP-13A	Lime Rail Loading Conveyor	
	LP-13B	Tank 445 Rail Conveyor	
	LP-13C	Tank 446 Rail Conveyor	
	LP-13D	Tank 446 Rail Conveyor	
	LP-13E	Dolo to Rail Loadout Conveyor	
LP-16	LP-6	Dolo Process Loading Spout	11-A-335-S3
	LP-16B	Dolo Process Bins	
	LP-16C	Dolo Process Conveying	
	LP-16S	Dolo Process Screener and Crusher	

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
LP-17	LP-17	Dolo Truck Loading Spout	11-A-336-S3
	LP-17-1	Dolo Loadout Conveyor #1	
	LP-17-2	Dolo Loadout Conveyor #2	
	LP-17-4	Bathtub Bins (5 total)	
	LP-1Q	C352 Dolo Belt to Loadout	
	LP-1R	C353 Dolo Drag Conveyor	
Solid Fuel-01	Solid Fuel-01	Solid Fuel Pile	17-A-504-S1
LP-20	LP-20	Solid Fuel Hopper	17-A-495-S1
LP-39	LP-39	Solid Fuel Crusher	17-A-505-S2
	LP-39A	Crusher Burner	
LP-24	LP-21	Kilns Solid Fuel Conveyor	17-A-494-S1
	LP-25	Kilns Solid Fuel Tank	
LP-36	LP-36	Kiln # 3 Rockbox Conveyor	17-A-491
	LP-37	Kiln # 3 Rockbox	
LP-38	LP-38	Kiln #1, 2 Rockbox Conveyor	17-A-492-S1
	LP-52	Kiln #1 Rockbox	
	LP-40	Kiln #2 Rockbox	
Q-1	Q-1	Primary Crushing	11-A-337-S1
	Q1C1	Conveyor 1	
	Q1C2	Conveyor 2	
Q-2LP	LP1 Belt	Secondary Crushing/Screening – Lower Plant	18-A-112-S2
	LP1 Screen		
	LP1 Crusher		
	LP6 Belt		
	LP9 Belt		
	LP4A Belt		
	LP2 Screen		
	LP4 Stacker		
	LP3 Stacker		
	LP5 Stacker		
	LP8 Stacker		
	Pile 7 (In pit)		
	Pile 9 (In pit)		
Q-2TP	TP1a	TP1a Belt	18-A-113
	TP1b	TP1b Belt	
	TP2	TP2 Belt	
	TP1 N	TP1 N Screen	
	TP1 S	TP1 S Screen	
	TP3	TP3 Crusher Belt	
	TP1	TP1 Crusher	
	TP4	TP4 Crusher Return Belt	
	TP6	TP6 Cross Belt	
	TP8	TP8 Belt	
	TP3	TP3 West Screen	
	TP4	TP4 East Screen	
	TP9	TP9 Belt	

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
	TP11	TP11 Belt	
	TP14	TP14 Belt Washer	
	TP12	TP12 Belt	
	TP17	TP17 Belt	
	TP6	TP6 PEP Screen	
	TP5	TP5 Sugarbeet Stacker	
	TP16	TP16 Belt Stacker (wet material processed)	
	TP18	TP18 Stacker (wet material processed)	
	TP19	TP19 Stacker (wet material processed)	
	Pile 4	Pile 4	
Pile 1	Pile 1	Storage Pile 1	18-A-114-S1
Pile 8	Pile 8	Material Storage Pile 8	18-A-115
Pile 14	Pile 14	Material Storage Pile 14	18-A-116-S1
Pile A	Pile A	Material Storage Pile A (Includes Piles Barge, B, E, H)	18-A-117-S2
EM Engine	EM Engine	Kilns Emergency Engine	NA

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
GS LP	Gasoline Storage LP 1000 gal
DS LP	Diesel Storage LP 1000 gal
DS Q1	Quarry 1 Diesel 9700 gal
DS Q2	Quarry 2 Diesel 12,500 gal
DS Q3	Quarry 3 Diesel 1000 gal 0.2
DS M1	Diesel Mine Bio 12,000 gal
DS M2	Diesel Mine 2 - 1750 gal
ISH	Maintenance Shop 0.4 MMBtu

II. Plant-Wide Conditions

Facility Name: Linwood Mining & Mineral Corporation

Permit Number: 04-TV-005R3

Permit conditions are established in accord with 567 Iowa Administrative Code rule 24.108 When 567 IAC as amended May 15, 2024, and cited in this permit becomes State Implementation Plan (SIP) approved, it will supersede 567 IAC as amended February 8, 2023. Prior to May 15, 2024, all Title V rule citations in this Title V permit were found and cited in 567 IAC Chapter 22. During the period from May 15, 2024, to the date that 567 IAC as amended May 15, 2024, is approved into the SIP, both 567 IAC as amended May 15, 2024 and 567 IAC as amended February 8, 2023 form the legal basis for the applicable requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix C.

Permit Duration

The term of this permit is: 5 years

Commencing on: **DATE**

Ending on: **DATE**

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 24.110 - 24.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 24.115.

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"

40 CFR 60 – Subpart A

The Permittee shall comply with the applicable requirements of 40 CFR 60 Subpart A – General Provisions for all sources subject to 40 CFR 60 Subpart OOO - *Standards of Performance for Nonmetallic Mineral Processing Plants* and 40 CFR 60 Subpart HH – *Standards of Performance for Lime Manufacturing Plants*. Excerpts of the Subpart A Requirements are shown below and are provided for reference only:

Sec. 60.12 Circumvention.

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission, which

would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard, which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

Sec. 60.14 Modification.

(a) Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

Sec. 60.15 Reconstruction.

(a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.

Authority for Requirement: 40 CFR 60 Subpart A – General Provisions
567 IAC 23.1(2)

Administrative Consent Order NO. 98-AQ-7

The requirements of Administrative Consent Order (ACO) 98-AQ-7 are included in Iowa's federally approved State Implementation Plan (SIP). While a subsequent ACO, 2002-AQ-10, superseded and replaced the 98-AQ-7 ACO, the 2002-AQ-10 ACO was never submitted for inclusion in the SIP and the 98-AQ-7 ACO was never submitted for removal from the SIP. As such, although Iowa rescinded the 2002-AQ-10 ACO on April 19, 2019, the requirements of ACO 98-AQ-7 remain in the SIP. The DNR has incorporated the still-relevant requirements of these ACOs into current construction permits. The DNR will request that those construction permits be included in Iowa's federally approved SIP and that ACO 98-AQ-7 be removed. This operating permit includes requirements from the current construction permits and the 98-AQ-7 ACO. However, no action will be required on the part of the permittee to remove the 98-AQ-7 ACO's requirements from this operating permit subsequent to and conditioned upon EPA's final action removing ACO 98-AQ-7 from the Iowa SIP.

See Appendix A for further information.

III. Emission Point-Specific Conditions

Facility Name: Linwood Mining & Mineral Corporation
 Permit Number: 04-TV-005R3

Emission Point ID Number: BL01 and BL02

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
BL01	East Barge Loadout	BL01: Windscreen and Water Suppression	Limestone	400 ton/hr	02-A-168-S3
BL02	West Barge Loadout	BL02: Windscreen and Water Suppression	Limestone	575 ton/hr	02-A-169-S3

Applicable Requirements

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

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

Pollutant: Opacity-Conveyor Stacker

Emission Limit(s): 10% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 02-A-168-S3, 02-A-169-S3
 40 CFR 60 Subpart OOO

567 IAC 23.1(2)"bbb"

Pollutant: Particulate Matter (PM)

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

Authority for Requirement: DNR Construction Permit 02-A-168-S3, 02-A-169-S3
 567 IAC 23.3(2)"a"

EP BL01 Only

Pollutant: PM₁₀

Emission Limit(s): 0.112 lb/hr

Authority for Requirement: DNR Construction Permit 02-A-168-S3

EP BL02 Only

Pollutant: PM₁₀

Emission Limit(s): 0.161 lb/hr

Authority for Requirement: DNR Construction Permit 02-A-169-S3

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The maximum combined throughput of emission units BL01 and BL02 shall not exceed 8,625 tons per calendar day.
 - i. The owner or operator shall maintain records of the total throughput of BL01 and BL02 for each calendar day in tons.
- B. The owner or operator shall operate either BL01 or BL02 at one time. Simultaneous operation of the barge loadouts is not allowed.
- C. Emission units BL01 and BL02 shall operate only between March 1 and December 31.
- D. Emission units BL01 and BL02 shall operate Monday through Saturday and between hours of 5 am and 8 pm each day.
 - i. The owner or operator shall maintain records detailing the date and operation times (start and stop) for BL01 and BL02.
- E. The owner or operator shall operate water suppression system when visible emissions from processing units associated with East or West barge Loadout are observed.
- F. The owner or operator shall check for visible emissions each time the East and West barge loadouts are used. This requirement shall not apply on the days that processing units associated with East barge Loadout or West barge Loadout are 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 for each loadout.
 - ii. If the owner or operator observes visible emissions during barge loading, the owner or operator shall investigate the emission unit, or the operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken.
- G. The owner or operator shall develop an operating and maintenance plan for the water suppression system, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the water suppression system.

Authority for Requirement: DNR Construction Permit 02-A-168-S3, 02-A-169-S3

NSPS

The facility is subject to the New Source Performance Standard (NSPS), Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants and the conveyor stacker is subject to Subpart OOO per 40 CFR §60.670 – 40 CFR §60.676.

Authority for Requirement: DNR Construction Permit 02-A-168-S3, 02-A-169-S3
40 CFR 60 Subpart A
567 IAC 23.1(2)
40 CFR 60 Subpart OOO
567 IAC 23.1(2)"bbb"

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 24.108(3)

Emission Point ID Number: CC-1

Associated Equipment

Associated Emission Unit ID Numbers: Old Mill (See complete emission unit list in Table 1:
Old Mill Units)

Emissions Control Equipment ID Number: CE CC-1

Emissions Control Equipment Description: Baghouse

Raw Material/Fuel: Limestone

Table 1: Old Mill Units

Emission Unit	Rated Capacity
Storage Tank CL2 (CC-01K)	138 tons of ingredient (limestone or ash)
Storage Tank CL3 (CC-01L)	138 tons of ingredient (limestone or ash)
Old Mill Dryer (EU CC-1a)	40 tons/hr
Old Mill Cage Mill (EU CC-1b)	40 tons/hr
Old Mill Screen (EU CC-1c)	60 tons/hr
Old Mill Screen (EU CC-1d)	60 tons/hr
Old Mill Separator 1 (EU CC-1e)	40 tons/hr
Old Mill Separator 2 (EU CC-1f)	30 tons/hr
Old Mill Conveyors/Screws/Elevators (EU CC-1g) Includes Transfer Point CL-1 From Tank and Transfer Point CL-1 to Elevator	60 tons/hr
Old Mill Finished Storage Tank (EU CC-1h)	1200 tons
Old Mill Finished Storage Tank (EU CC-1i)	1200 tons
Storage Bin (EU CC-1j)	138 tons
Storage Bin (EU CC-1k)	138 tons
Storage Bin (EU CC-1l)	138 tons
Storage Bin (EU CC-1m)	138 tons
South Tank (CC-13)	175 tons
North Tank (CC-12)	400 tons
#3 Loadout System (EU CC-1r) Includes a pneumatic conveyor (60 TPH), an enclosed belt conveyor (60 TPH), two load out spouts and a scale.	Total = 120 tons/hr Max allowed = 60 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 71-A-084-S12
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀
Emission Limit(s): 2.48 lb/hr
Authority for Requirement: DNR Construction Permit 71-A-084-S12

Pollutant: Particulate Matter (PM) - Federal
Emission Limit(s): 0.032 g/dscm⁽²⁾
Authority for Requirement: DNR Construction Permit 71-A-084-S12
567 IAC 23.1(2)"bbb"
40 CFR 60 Subpart OOO

⁽²⁾0.032 grams per dry standard cubic meter (g/dscm) = 0.014 grains per dry standard cubic foot (gr/dscf).

Pollutant: Particulate Matter (PM) - State
Emission Limit(s): 2.48 lb/hr, 0.1 gr/dscf.
Authority for Requirement: DNR Construction Permit 71-A-084-S12
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: DNR Construction Permit 71-A-084-S12
567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

- A. The fuel combusted in the Old Mill Dryer (EU CC-1a) is limited to natural gas.
- B. The facility shall operate only one of the following conveying systems, which are associated with #3 Loadout System (EU CC-1r), at a time:
 - i. Pneumatic conveyor
 - ii. Fully enclosed belt conveyor
- C. The owner or operator shall implement written procedures onsite to ensure only one conveyor system is operated. These procedures shall be retained onsite and made available for inspection.
- D. The owner or operator shall conduct visible emissions observation (Method 22) on emission units associated with #3 Loadout System (EU CC-1r) once per calendar week.
- E. If the owner or operator observes visible emissions from emission units associated with #3 Loadout System (EU CC-1r), the owner or operator shall investigate the emission units, control equipment or operations associated with EU CC-1r and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that emission units, control equipment or operations associated with EU CC-1r are not in operation.
- F. Per 40 CFR §60.674(c), the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions must conduct quarterly 30-minute visible emissions inspections using EPA Method 22 (40 CFR part 60, appendix A-7). The Method 22 (40 CFR part 60, appendix A-7) test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are

observed, the owner or operator of the affected facility must initiate corrective action within 24 hours to return the baghouse to normal operation. The owner or operator must record each Method 22 (40 CFR part 60, appendix A-7) test, including the date and any corrective actions taken, in the logbook required under §60.676(b).

- G. Per 40 CFR §60.676(b), the results of each Method 22 test, including the date and any corrective actions taken.
- H. The differential pressure drop across Baghouse (CE CC-1) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE CC-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE CC-1), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE CC-1) falls outside the range specified in Condition H., the owner or operator shall investigate Baghouse (CE CC-1) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE CC-1) is not in operation.
- I. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE CC-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE CC-1).

Authority for Requirement: DNR Construction Permit 71-A-084-S12

NSPS

These emission units are subject to NSPS Subparts A (*General Provisions*; 40 CFR §60.1 – 40 CFR §60.19) and OOO (*Standards of Performance for Nonmetallic Mineral Processing Plants*; 40 CFR §60.670 – 40 CFR §60.676).

Authority for Requirement: DNR Construction Permit 71-A-084-S12
40 CFR 60 Subpart A
567 IAC 23.1(2)
40 CFR 60 Subpart OOO
567 IAC 23.1(2)"bbb"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft. from the ground): 72
Stack Opening (inches, dia): 42
Exhaust Flow Rate (scfm): 34,800
Exhaust Temperature (°F): 150
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 71-A-084-S12

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 - PM
Stack Test to be Completed by (date) – Within 2 years of permit issuance
Test Method - 40 CFR 60, Appendix A, Method 5
40 CFR 51 Appendix M Method 202
Authority for Requirement - 567 IAC 24.108(3)

Pollutant – PM₁₀
Stack Test to be Completed by (date) – Within 2 years of permit issuance
Test Method - 40 CFR 51, Appendix M, 201A with 202
Authority for Requirement - 567 IAC 24.108(3)

The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 21.10(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 24.108(3)

Emission Point ID Number: CC-2

Associated Equipment

Associated Emission Unit ID Numbers: New Mill (See complete emission unit list in Table 1:
New Mill Units)

Emissions Control Equipment ID Number: CE CC-2

Emissions Control Equipment Description: Baghouse

Table 1: New Mill Emission Units

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity
CC-2b	New Mill Hammermill 1	Limestone	50 tons/hr
CC-2c	New Mill Hammermill 2		50 tons/hr
CC-2d	New Mill Separator 18'		100 tons/hr
CC-2e	New Mill Screen		25 tons/hr
CC-2f	New Mill Screen		25 tons/hr
CC-2g	New Mill Screen		25 tons/hr
CC-2h	New Mill Screen		25 tons/hr
CC-2i	New Mill Raymond Mill		35 tons/hr
CC-2k	New Mill Conveyors/Screws/Elevators		100 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): See Note ⁽¹⁾

Authority for Requirement: DNR Construction Permit 86-A-049-S9
567 IAC 23.3(2)"c"

⁽¹⁾IAC reference to NSPS Subpart OOO (*Standards of Performance for Nonmetallic Mineral Processing Plants*; 40 CFR §60.670 – 40 CFR §60.676).

Pollutant: PM₁₀

Emission Limit(s): 1.61 lb/hr

Authority for Requirement: DNR Construction Permit 86-A-049-S9

Pollutant: Particulate Matter (PM) - Federal

Emission Limit(s): 0.032 g/dscm ⁽²⁾

Authority for Requirement: DNR Construction Permit 86-A-049-S9
567 IAC 23.1(2)"bbb" ⁽³⁾
40 CFR 60 Subpart OOO

⁽²⁾0.032 grams per dry standard cubic meter (g/dscm) = 0.014 grains per dry standard cubic foot (gr/dscf). Limit established per 40 CFR §60.672(a).

Pollutant: Particulate Matter (PM) - State

Emission Limit(s): 1.61 lb/hr, 0.01 gr/dscf⁽⁴⁾

Authority for Requirement: DNR Construction Permit 86-A-049-S9
567 IAC 31.20(1)"d", LAER

⁽⁴⁾ Limit established when the Buffalo, IA area was designated nonattainment for Total Suspended Particulates (TSP). Any relaxation of the Lowest Achievable Emission Rate (LAER) after the Buffalo area is redesignated attainment for TSP is subject to review under the Prevention of Significant Deterioration (PSD) regulations in effect at the time the relaxation occurs.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The owner or operator shall maintain record per 40 CFR §60.676(b), the results of each Method 22 test, including the date and any corrective actions taken.
- B. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition C (shown below) by June 30, 2019.
 - i. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.
- C. The differential pressure drop across Baghouse (CE CC-2) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE CC-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE CC-2), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE CC-2) falls outside the range specified in condition C (shown above), the owner or operator shall investigate Baghouse (CE CC-2) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE CC-2) are not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE CC-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE CC-2).

Authority for Requirement: DNR Construction Permit 86-A-049-S9
40 CFR 60 Subpart OOO
567 IAC 23.1(2)"bbb"

NSPS

These emission units are subject to NSPS Subparts A (*General Provisions*; 40 CFR §60.1 – 40 CFR §60.19) and OOO (*Standards of Performance for Nonmetallic Mineral Processing Plants*; 40 CFR §60.670 – 40 CFR §60.676).

Authority for Requirement: DNR Construction Permit 86-A-049-S9
40 CFR 60 Subpart A
567 IAC 23.1(2)
40 CFR 60 Subpart OOO
567 IAC 23.1(2)"bbb"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft., from the ground): 60
Stack Opening (inches, dia): 42
Exhaust Flow Rate (scfm): 30,600
Exhaust Temperature (°F): 150
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 86-A-049-S9

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.

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
Opacity	Yes ⁽¹⁾	Stack Test ⁽¹⁾	30 minutes	40 CFR 60, Appendix A, Method 22

Authority for Requirement: DNR Construction Permit 86-049-S9

⁽¹⁾Per 40 CFR §60.674(c), the owner or operator shall conduct quarterly thirty (30) minute visible emissions inspections using EPA Method 22 (40 CFR Part 60, Appendix A-7). The Method 22 test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are observed, the owner or operator of the affected facility must initiate corrective action within twenty-four (24) hours to return the baghouse to normal operation. The owner or operator of the affected facility may establish a different baghouse specific success level for the visible emissions test (other than no visible emissions) by conducting a PM performance test according to 40 CFR §60.675(b) simultaneously with Method 22 to determine what constitutes normal visible emissions from the affected facility’s baghouse when it is in compliance with the applicable PM concentration limit. The revised visible emissions success level must be incorporated into the permit for the affected facility.

Stack Testing:

Pollutant - PM

Stack Test to be Completed by (date) – Within 2 years of permit issuance

Test Method - 40 CFR 60, Appendix A, Method 5

40 CFR 51 Appendix M Method 202

Authority for Requirement - 567 IAC 24.108(3)

Pollutant – PM₁₀

Stack Test to be Completed by (date) – Within 2 years of permit issuance

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

Authority for Requirement - 567 IAC 24.108(3)

The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 21.10(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 24.108(3)

Emission Point ID Number: CC-3

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	DNR Construction Permit
CC-3	Calcium Railcar Loadout	CE CC-3: Baghouse	Limestone	160 tons/hr	88-A-218-S6
CC-3A	North/South Belt			160 tons/hr	
CC-3B	East/West Belt			160 tons/hr	
CC-3C	Calcium Truck Loadout			85 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): 7%

Authority for Requirement: DNR Construction Permit 88-A-218-S6
40 CFR 60 Subpart OOO
567 IAC 23.1(2)"bbb"

Pollutant: PM₁₀

Emission Limit(s): 0.36 lb/hr

Authority for Requirement: DNR Construction Permit 88-A-218-S6

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.02 gr/dscf

Authority for Requirement: DNR Construction Permit 88-A-218-S6
40 CFR 60 Subpart OOO
567 IAC 23.1(2)"bbb"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The maximum amount of product loaded out using the Calcium Railcar loadout shall not exceed 160 tons per hour averaged over 3-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of product loaded out in tons.
 - ii. The owner or operator shall maintain records of the 3-hour average the amount of product loaded out in tons.
- B. The maximum amount of product loaded out using the Calcium Truck loadout shall not exceed 85 tons per hour averaged over 3-hr period.

- i. For each hour, the owner or operator shall maintain records of the amount of product loaded out in tons.
 - ii. The owner or operator shall maintain records of the 3-hour average the amount of product loaded out in tons.
- C. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition D (shown below) by May 1, 2018.
 - i. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.
- D. The differential pressure drop across Baghouse (CE CC-3) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE CC-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE CC-3), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE CC-3) falls outside the range specified in condition D (shown above), the owner or operator shall investigate Baghouse (CE CC-3) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE CC-3) are not in operation.
- E. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE CC-3), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE CC-3).

Authority for Requirement: DNR Construction Permit 88-A-218-S6

NSPS

These emission units are subject to NSPS Subparts A (General Provisions; 40 CFR §60.1 – 40 CFR §60.19) and OOO (Standards of Performance for Nonmetallic Mineral Processing Plants; 40 CFR §60.670 – 40 CFR §60.676).

Authority for Requirement: DNR Construction Permit 88-A-218-S6
 40 CFR 60 Subpart A
 567 IAC 23.1(2)
 40 CFR 60 Subpart OOO
 567 IAC 23.1(2)"bbb"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height (ft., from the ground): 37
- Stack Opening (inches): 17
- Exhaust Flow Rate (scfm): 1,500
- Exhaust Temperature (°F): Ambient
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: DNR Construction Permit 88-A-218-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.

Stack Testing:

- Pollutant - PM
- Stack Test to be Completed by (date) – Within 2 years of permit issuance
- Test Method - 40 CFR 60, Appendix A, Method 5
40 CFR 51 Appendix M Method 202
- Authority for Requirement - 567 IAC 24.108(3)

The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 21.10(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 24.108(3)

Emission Point ID Number: CC-5

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	DNR Construction Permit
CC-2a	Dryer	CE CC-5: Baghouse	Limestone	70 tons/hr	98-A-846-S2
			Natural Gas	0.0287 MMcf/hr (28.7 MMBtu/hr)	
CC-2k	Conveyors/Screws Elevators		Limestone	100 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): 7%

Authority for Requirement: DNR Construction Permit 98-A-846-S2
40 CFR 60 Subpart OOO
567 IAC 23.1(2)"bbb"

Pollutant: PM₁₀

Emission Limit(s): 0.93 lb/hr

Authority for Requirement: DNR Construction Permit 98-A-846-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf, 0.05 grams/dscm⁽¹⁾

⁽¹⁾ 0.05 grams/dscm = 0.022 gr./dscf

Authority for Requirement: DNR Construction Permit 98-A-846-S2
567 IAC 23.3(2)"a"
40 CFR 60 Subpart OOO
567 IAC 23.1(2)"bbb"

Pollutant: Particulate Matter (PM)

LAER Emission Limit(s): 0.01 gr/dscf ⁽²⁾

Authority for Requirement: DNR Construction Permit 98-A-846-S2
567 IAC 31.20(1)"d", LAER

⁽²⁾ Limit established when the Buffalo area was designated non-attainment for TSP (PM). Any relaxation in the Lowest Achievable Emission Rate (LAER) after the Buffalo Area is re-designated attainment for TSP (PM) is subject to review under the PSD regulations in effect at the time the relaxation occurs.

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: DNR Construction Permit 98-A-846-S2
567 IAC 23.3(3)"e"

NSPS

These units are subject to New Source Performance Standards (NSPS) Subpart A (General Provisions) and Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants).

Authority for Requirement: DNR Construction Permit 98-A-846-S2
40 CFR 60 Subpart A
567 IAC 23.1(2)
40 CFR 60 Subpart OOO
567 IAC 23.1(2)"bbb"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The fuel for the New Mill Dryer (EU CC-2a) is limited to natural gas.
- B. The owner or operator shall maintain the control equipment according to manufacturer's specifications and maintenance schedule.
- C. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the control equipment.

Authority for Requirement: DNR Construction Permit 98-A-846-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft., from the ground): 97

Stack Opening (inches, dia.): 30

Exhaust Flow Rate (scfm): 20,600

Exhaust Temperature (°F): 100

Discharge Style: Vertical unobstructed

Authority for Requirement: DNR Construction Permit 98-A-846-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.

Stack Testing:

Pollutant - PM

Stack Test to be Completed by (date) – Within 2 years of permit issuance

Test Method - 40 CFR 60, Appendix A, Method 5

40 CFR 51 Appendix M Method 202

Authority for Requirement - 567 IAC 24.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 21.10(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 24.108(3)

Emission Point ID Number: CC-16

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	DNR Construction Permit
CC-16	Long Conveyor	Limestone	70 tons/hr	17-A-488-S3
CC-17	Granular Bin #1		70 tons/hr	
CC-18	Granular Bin #2		70 tons/hr	
CC-19	Transfer Belt to Long Conveyor		25 tons/hr	

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 10%⁽¹⁾

Authority for Requirement: DNR Construction Permit 17-A-488-S3
40 CFR Part 60, Subpart OOO, Table 3
567 IAC 23.1(2)“bbb”

Pollutant: PM₁₀

Emission Limit(s): 0.08 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-488-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.21 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-488-S3
567 IAC 23.3(2)"a"(1)

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The owner or operator shall not operate the New Mill (EP CC-2) when the Transfer Belt to Long Conveyor (EU CC-19) is in operation.
 - a. The owner or operator shall maintain the following daily records:
 - i. Date, operation start, and operation end time when the Transfer Belt to Long Conveyor (EU CC-19) is in operation.
 - ii. Date, operation start, and operation end time for the New Mill (EP CC-2), on days when the Transfer Belt to Long Conveyor (EU CC-19) is in operation.
- B. The #6 Limestone Loadout System (EP CC-16) is restricted to transfer no more than 70 tons of limestone per hour, averaged over a 3-hour period.

- (1) Once every hour, the owner or operator shall collect and record the amount, in tons, of limestone transferred and calculate and record the 3-hour average using all data points collected during the averaging period. This requirement shall not apply when the #6 Limestone Loadout System (EP CC-16) is not in operation.
 - (2) The owner or operator shall install equipment necessary to monitor the amount of limestone transferred every hour the #6 Limestone Loadout System (EP CC-16) is in operation. The monitoring equipment shall be operated and maintained according to the manufacturer's recommendations, instructions, and operating manuals.
- C. The owner or operator shall conduct visible emissions observations on EP CC-16 once per calendar week. This requirement shall not apply on the days that the #6 Limestone Loadout System (EP CC-16) is not in operation.
- (1) The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions.
 - (2) If visible emissions from EP CC-16 are observed, the owner or operator shall investigate the affected emission units and make corrections to the associated equipment.
 - (3) The owner or operator shall maintain a record of all corrective actions taken.
- D. The owner or operator shall comply with the applicable requirements in 40 CFR Part 60, Subpart OOO [*Standards of Performance for Nonmetallic Mineral Processing Plants* (§60.670 - §60.676)].
- (1) The owner or operator shall comply with the applicable reporting and recordkeeping requirements in 40 CFR §60.676 of Subpart OOO.
- Authority for Requirement: DNR Construction Permit 17-A-488-S3
567 IAC 23.1(2)"bbb"
40 CFR 60 Subpart OOO

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

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

Stack Opening (inches, dia.): 32 x 32

Exhaust Flow Rate (scfm): 2,178

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 17-A-488-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.

Compliance Demonstrations

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
Opacity	Performance Test ⁽¹⁾	Initial	See Footnote (2)	40 CFR 60, Appendix A, Method 9
		One Time		

If an initial stack test is specified in the “Compliance Demonstrations” table, the owner or the owner’s authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 (Emission Limits) within the applicable time period specified below:

- Within 60 days after achieving the maximum production rate but not later than 180 days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.

Authority for Requirement: DNR Construction Permit 17-A-488-S3

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 24.108(3)

Emission Point ID Number: HR-U

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Rated Capacity	Construction Permit
HR-U	Unpaved Haul Roads	CE Unpaved Haul Roads: Dust Suppressant	NA	18-A-108-S1

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: Fugitive Dust ⁽¹⁾

Authority for Requirement: DNR Construction Permit 18-A-108-S1
567 IAC 23.3(2)"c"

⁽¹⁾The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Pollutant: PM₁₀

Emission Limit(s): 409 lbs/day ⁽²⁾

Authority for Requirement: DNR Construction Permit 18-A-108-S1

⁽²⁾Emission limit for PM₁₀ established at 409 pounds of PM₁₀ per day, which correlates to surface silt loading as specified in Condition A and B of Operational Limits & Requirements (below) and maximum worst case truck traffic (material/product is shipped or received by truck). The parameters used in calculation are specified in Condition A and B (below). The emission rate also includes emissions of haul roads located within the storage Piles A, Pile 4, and Pile 8.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The total surface material silt content shall not exceed 2.1 percent on unpaved road segments 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 24.
- i. Beginning October 1, 2018, performance testing on the unpaved haul road surface silt content shall be determined once every other calendar month. 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.
If suppressant application cannot be accomplished for the entire month due to ambient temperatures or hazardous weather, silt content sampling is not required for that month.
 - ii. Silt content sampling shall be conducted on unpaved road segments 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 24. The owner or operator shall sample a minimum of three

- unpaved road segments and rotate the segments sampled each time. The owner or operator shall determine the average of all samples taken each time, expressed as silt content for the unpaved roads.
- iii. The owner or operator shall maintain a log of each silt content sampling event that contains the following:
 - i. Records of the road segments sampled every other calendar month.
 - ii. The measured silt content as percent.
 - iii. The date of silt sampling event.
 - iv. The location of the sample taken.
 - v. Sample area used for silt sampling in feet.
 - vi. The operator's initials.
 - iv. The owner or operator shall maintain record of the average silt content results expressed as percent every other calendar month.
- B. The total surface material silt content shall not exceed 6.2 percent on unpaved road segments 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 82, 83, and 84.
- i. Beginning October 1, 2018, performance testing on the unpaved haul road surface silt content shall be determined 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. Silt content sampling shall be conducted on unpaved road segments 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 82, 83, and 84. The owner or operator shall sample a minimum of three unpaved road segments and rotate the segments sampled for each calendar quarter. The owner or operator shall determine the average of all samples taken for each calendar quarter, expressed as silt content for the unpaved roads.
 - iii. The owner or operator shall maintain a log of each silt content sampling event that contains the following:
 - i. Records of the road segments sampled each quarter.
 - ii. The measured silt content as percent.
 - iii. The date of silt sampling event.
 - iv. The location of the sample taken.
 - v. Sample area used for silt sampling in feet.
 - vi. The operator's initials.
 - iv. The owner or operator shall maintain record of the average silt content results expressed as percent for each quarter.
- C. The owner or operator shall utilize control measures to reduce particulate emissions generated on unpaved road segments, while in use except as noted in conditions C.ii and C.iii (shown 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 of twice per month.
 - ii. If the suppressant 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.

- iii. 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
- D. If visible emissions are observed from the Unpaved Road Segments, during use, the owner or operator shall immediately apply water or chemical dust suppressant to haul road segment.
- E. The owner or operator shall maintain as record of the suppressant application on unpaved road segments. The record shall include suppressant application frequency, quantity applied and suppressant utilized. If suppressant is not applied due to weather as specified in conditions C.ii and C.iii (shown 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 segments. 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 (10 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 (shown above). The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.
- H. Maximum number of trucks shall not exceed:
 - i. 2,208 trucks per calendar month on segment 13.
 - ii. 4772 trucks per calendar month on segment 85.
 - iii. The owner or operator shall record the total number of trucks on segment 13 for each calendar month.
 - iv. The owner or operator shall record the total number of trucks on segment 85 for each calendar month.
 - v. Based on throughput and storage capacity limitations, the plant truck traffic on paved and unpaved surfaces is directly proportional to the quantity of trucks measured on segments 13 and 85 (customer output). If plant operations change, the owner or operator shall request amendment of the paved or unpaved haul roads permit requirements.

Authority for Requirement: DNR Construction Permit 18-A-108-S1

Monitoring Requirements

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

Compliance Demonstration(s)

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM10	Silt Sampling	Quarterly	NA	AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading, Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples
PM10	Silt Sampling	Once every other calendar month (segments 2,3,4,5,6,7,8,9,10,11, 12 and 24)*	NA	

*The facility could request the department to lower silt sampling frequency after successfully collecting at least 4 data points.

Authority for Requirement: DNR Construction Permit 18-A-108-S1

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 24.108(3)

Emission Point ID Number: HR-P

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
HR-P	Paved Haul Roads	CE Paved Haul Roads: Sweeping and Water Flushing	Limestone	NA	18-A-109-S1

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: Fugitive Dust ⁽¹⁾

Authority for Requirement: DNR Construction Permit 18-A-109-S1
567C 23.3(2)"c"

⁽¹⁾The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Pollutant: PM₁₀

Emission Limit(s): 58.32 lbs/day ⁽²⁾

Authority for Requirement: DNR Construction Permit 18-A-109-S1

⁽²⁾Emission limit for PM₁₀ established at 58.32 pounds of PM₁₀ per day, which correlates to surface silt loading as specified in Condition A of Operational Limits & Requirements (below) and maximum worst case truck traffic (material/product is shipped or received by truck). The parameters used in calculation are specified in Condition A of Operational Limits & Requirements (below).

Operational Limits & Requirements

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

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The total surface material silt loading shall not exceed 8.2 g/m² on paved road segments 1, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 85 and 86.
 - i. Beginning October 1, 2018, performance testing on the haul road surface silt loading shall be determined on a quarterly basis. Performance testing shall be completed prior to any sweeping or water flushing. The silt loading 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. Surface silt loading sampling shall be conducted on paved road segments, as listed in 1, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 85 and 86. The owner or operator shall sample a minimum of three paved road segments and rotate the segments sampled each calendar quarter. The owner or operator shall determine the average of all samples taken for each calendar quarter, expressed as silt loading for the paved roads.
 - iii. The owner or operator shall maintain a log of each silt load sampling event that contains the following:
 - a. Records of the road segments sampled each quarter.
 - b. The measured silt loading as grams.
 - c. The date of silt sampling event.
 - d. The location of the sample taken.
 - e. Sample area used for silt sampling in feet.
 - f. The operator's initials.
 - iv. The owner or operator shall maintain record of the average silt loading results in g/m^2 for each quarter.
- B. Truck traffic emissions on the paved road shall be controlled by weekly sweeping, at a minimum, except as specified in conditions B. i, ii, and iii (shown below). At a minimum, the sweeper shall be an enclosed vacuum sweeper or functional equivalent as approved by the department.
- i. If sweeping cannot be accomplished 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 sweeping shall be postponed and accomplished as soon after the scheduled date as the conditions preventing the sweeping have abated.
 - ii. Paved road sweeping 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, paved road sweeping shall resume within 24-hours after the precipitation event has ended.
 - iii. Paved road sweeping need not occur when the facility experiences no haul road traffic on that calendar day.
 - iv. The facility shall record the frequency of cleaning/sweeping performed on the haul roads. If the roads are not cleaned due to weather, a written record must be kept on site outlining the conditions.
- C. Truck traffic emissions on the paved road shall be controlled by water flushing at a rate of 0.12 gallons per square feet, three times a day at a minimum, except as specified in B. i, ii and iii (shown above).
- i. If water flushing cannot be accomplished 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 water flushing shall be postponed and accomplished as soon after the scheduled date as the conditions preventing the water flushing have abated.
 - ii. Paved road water flushing 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, paved road water flushing shall

- resume within 24-hours after the precipitation event has ended.
- iii. Paved road water flushing need not occur when the facility experiences no haul road traffic on that calendar day.
 - iv. The facility shall record the frequency of water flushing performed on the haul roads. If the roads are not water flushed due to weather, a written record must be kept on site outlining the conditions.
- D. Maximum number of trucks shall not exceed:
- i. 2,208 trucks per calendar month on segment 13.
 - ii. 4,772 trucks per calendar month on segment 85.
 - iii. The owner or operator shall record the total number of trucks on segment 13 for each calendar month.
 - iv. The owner or operator shall record the total number of trucks on segment 85 for each calendar month.
 - v. Based on throughput and storage capacity limitations, the plant truck traffic on paved and unpaved surfaces is directly proportional to the quantity of trucks measured on segments 13 and 85 (customer output). If plant operations change, the owner or operator shall request amendment of the paved or unpaved haul roads permit requirements.
- E. Best Management Practices (BMP) – The owner or operator shall implement "good housekeeping" or best management practices to minimize fugitive emissions from plant haul roads. Such practices include but are not limited to:
- i. Clean up spills of raw materials and product on the haul road surface as expeditiously as possible and in a manner consistent with good practice for minimizing dust emissions.
 - ii. Clean around truck scale areas and process buildings in a manner consistent with good practice for minimizing fugitive emissions.
 - iii. Clean up spills of raw materials and product on Iowa Highway 22 as expeditiously as possible and in a manner consistent with good practice for minimizing dust emissions.
 - iv. Post and maintain speed limit (10 mph) signs.
- F. The owner or operator shall develop a written plan to implement, at a minimum, the Best Management Practices as specified in condition E (shown 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 18-A-109-S1

Monitoring Requirements

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

Compliance Demonstration(s)

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM10	Silt Sampling	Quarterly (segments 1, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 85 and 86)	NA	AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading, Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples

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 24.108(3)

Emission Point ID Number: Storage Piles

Associated Equipment

Emission Point/Unit	Emission Unit Description	Raw Material	Rated Capacity (ft ²)	Construction Permit
Pile 2	Material Storage Pile 2 Undisturbed pile	Limestone	12,628	18-A-110-S1
Pile 3	Material Storage Pile 3		28,825	
Pile 5	Material Storage Pile 5		40,166	
Pile 10	Material Storage Pile 10 Undisturbed pile		19,814	
Pile 11	Material Storage Pile 11		33,485	
Pile 12	Material Storage Pile 12 Undisturbed pile		55,683	
Pile 13	Material Storage Pile 13 Undisturbed pile		442,704	
Pile 15	Material Storage Pile 15 Undisturbed pile		535,773	
Pile 16	Material Storage Pile 16		87,425	
Pile 17	Material Storage Pile 17		203,244	
Pile 18	Material Storage Pile 18 Undisturbed pile	1,170,056		

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 (All Material Storage Piles)

Emission Limit: Fugitive Dust ⁽¹⁾

Authority for Requirement: DNR Construction Permit 18-A-110-S1
567 IAC 23.3(2)"c"

⁽¹⁾The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Pollutant: PM₁₀

Emission Limit(s) Pile 2 (Undisturbed): 0.18 lbs/day

Emission Limit(s) Pile 3: 1.16 lbs/day

Emission Limit(s) Pile 5: 2.7 lbs/day

Emission Limit(s) Pile 10 (Undisturbed): 0.08 lbs/day

Emission Limit(s) Pile 11: 0.90 lbs/day

Emission Limit(s) Pile 12 (Undisturbed): 0.06 lbs/day

Emission Limit(s) Pile 13 (Undisturbed): 0.20 lbs/day

Emission Limit(s) Pile 15 (Undisturbed): 0.16 lbs/day

Emission Limit(s) Pile 16: 4.09 lbs/day

Emission Limit(s) Pile 17: 0.86 lbs/day

Emission Limit(s) Pile 18 (Undisturbed): 0.71 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-110-S1
567 IAC 23.3(2)"c"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The owner or operator shall maintain the area of Piles, in square feet, less than or equal to the area listed in the table below.
 - ii. Maintain records of area of each pile as listed in table below in square feet, on an annual basis.

EP ID	Maximum Area (square feet)
Pile 2	12,628
Pile 3	28,825
Pile 5	40,166
Pile 10	19,814
Pile 11	33,485
Pile 12	55,683
Pile 13	442,704
Pile 15	535,773
Pile 16	87,425
Pile 17	203,244
Pile 18	1,170,056

- B. The owner or operator shall notify the department within 30-days if the following storage piles are disturbed more frequently than once per calendar month.
 - i. Pile 2, Pile 10, Pile 12, Pile 13, Pile 15, and Pile 18.
 - ii. The owner or operator shall maintain records of the Pile 2, Pile 10, Pile 12, Pile 13, Pile 15, and Pile 18 disturbance frequency.
- C. During high wind episodes (greater than 12 miles per hour) if visible emissions are observed from the working face of active Piles listed in above (Pile 3, 5, 11, 16, and 17), the owner or operator shall employ measures to eliminate or minimize emissions. Such measures may include applying dust suppressant to working face of the pile or coverings the working face of the pile.
 - i. The owner or operator shall develop a written plan to implement at a minimum measure to minimize emissions during high wind episodes as specified in condition C. 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 18-A-110-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 24.108(3)

Emission Point ID Number: LP-4 (Current State)

Associated Equipment

Emission Unit	Maximum Capacity	1 st set of Control Equipment	2 nd Set of Control Equipment
Dry Rotating Kiln (Kiln #1)	5 tons of lime/hr	Production cyclones C1, C2, C3, C4	Limestone Mining Tunnel (CE TL1)
Dry Rotating Kiln (Kiln #2)	5 tons of lime/hr	Production cyclones C1, C2, C3, C4	
Preheater Lime Kiln (Kiln #3)	8.75 tons of lime/hr	Production cyclones C1, C2, C3, C4	
Preheater Lime Kiln (Kiln #4)	21.875 tons of lime/hr	C4-East, C4-West	
Elevator 431 (LP-41)	50 ton/hr	C3, C4	
Conveyor 446 (LP-42)	50 ton/hr	C3, C4	
West Kiln Run Tank 442 (LP-50)	900 Tons	C3, C4	
East kiln Run Tank 443 (LP-51)	900 Tons	C3, C4	

Continuous Emission Monitoring ID Numbers: COM1*

*EPA-approved Alternative Opacity Monitoring is being used to demonstrate compliance instead of COM1.

Authority for Requirement: DNR Construction Permit 73-A-219-S8

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.

Emission Limits with Kiln 4 Operating

Pollutant	lb/hr	tons/yr	Additional Limits	Authority for Requirement
Particulate Matter (PM) – Federal	NA	NA	0.30 kg/megagram ⁽¹⁾	567 IAC 23.1(2)"y" 40 CFR Subpart HH
Particulate Matter (PM) – State	NA	NA	0.51 lb/ton lime	73-A-219-S8
PM ₁₀	45.59	NA	0.51 lb/ton lime	73-A-219-S8
Opacity	NA	NA	15%	567 IAC 23.1(2)"y" 40 CFR Subpart HH
Sulfur Dioxide (SO ₂)	9.45	41.4	See Footnote 2	567 IAC 23.3(3)
Nitrogen Oxides (NO _x)	58.9	272.2 ⁽³⁾	NA	73-A-219-S8
Carbon Monoxide (CO)	46.8	205.2	NA	73-A-219-S8
Hydrochloric Acid (HCl)	0.35	NA	NA	73-A-219-S8

⁽¹⁾ 0.30 kg/megagram of stone feed = 0.60 lb/ton of stone feed.

⁽²⁾ The sulfur dioxide limits are:

- 6 lb/MMBTU when combusting only on solid fuels (i.e. coal & pet coke)
- 500 ppm when combusting only gaseous fuels (i.e. natural gas)
- The stricter of the above standards when using a combination of fuels

⁽³⁾ Adjusted permit limit based on netting calculations to keep the addition of kiln 4 a PSD SM. The limit is 272.2 tons/yr (plant total). The limit was based on the following calculations:

$$\text{NO}_x \text{ baseline emissions (TPY)} = \text{EF}_1 \text{ lb/ton} \times 141,112 \text{ TPY lime} \div 2,000 \text{ lb/ton}$$

$$\text{NO}_x \text{ permit limit (TPY)} = \text{Baseline emissions} + 39.4 \text{ TPY}$$

Where: EF₁ (lb NO_x/ton of lime produced) was to be verified by testing the combined exhaust from kilns #1 and #2. The combined exhaust shall be used to purge the tunnel at least twelve (12) hours before conducting the stack test and the lime produced during the test period shall be recorded.

Authority for Requirement: DNR Construction Permit 73-A-219-S8

Emission Limits when Kiln 4 is not Operating

Pollutant	lb/hr	Additional Limits	Authority for Requirement
State Particulate Matter (PM)	NA	1.58 lb/ton of lime	73-A-219-S8
State Particulate Matter (PM)	NA	0.1gr/scf	567 IAC 23.4(8)
PM ₁₀	45.59	1.58 lb/ton lime	73-A-219-S8
Opacity	NA	40% ⁽¹⁾	567 IAC 23.3(2)"d"
Sulfur Dioxide (SO ₂)	NA	See Footnote 2	567 IAC 23.3(3)

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

⁽²⁾ The sulfur dioxide limits are:

- 6 lb/MMBTU when combusting only on solid fuels (i.e. coal & pet coke)
- 500 ppm when combusting only gaseous fuels (i.e. natural gas)
- The stricter of the above two standards when using a combination of fuels.

Authority for Requirement: DNR Construction Permit 73-A-219-S8

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. Total lime production for the plant shall be limited according to the plant annual total NO_x emission limitation set forth in Condition 1.a. and as listed in the equation in Condition A.i:
- i. Compliance with the annual NO_x limit shall be demonstrated as follows:
 Calculate the monthly NO_x emissions from Kilns #1 – #4:

$$\text{Tons of NO}_x \text{ emissions/month} = [(\text{tons of lime production from Kilns \#1 \& \#2}) \times (EF_1) + (\text{tons of lime production from Kilns \#3 \& \#4}) \times (EF_2)] \div 2000 \text{ lb/ton}$$
 Where:
 EF₁ = lb NO_x/ton of lime produced for the combined exhaust from kilns #1 and #2. The combined exhaust shall be used to purge the tunnel at least 12 hours before conducting the stack test, and the lime produced during the test period shall be recorded.
 EF₂ = lb NO_x/ton of lime produced for the combined exhaust from kilns #3 and #4. The combined exhaust shall be used to purge the tunnel at least 12 hours before conducting the stack test, and the lime produced during the test period shall be recorded.
 - ii. Calculate the twelve (12) month rolling total NO_x emissions for each month of operation.
- B. The owner or operator of Kiln #4 shall install, calibrate, maintain, and operate a device for measuring the mass rate of stone feed to Kiln #4. The measuring device used must be accurate to within ± 5% of the mass rate over its operating range pursuant to NSPS Subpart HH [40 CFR §60.343(d)].
- C. The owner or operator of the facility (plant number 82-01-015) shall either
1. Install, calibrate, maintain, and operate a device for measuring the mass rate of lime products from Kilns #1, #2, #3, and #4. The measuring device used must be accurate to within ± 5% of the mass rate over its operating range or

2. In lieu of installing a belt scale on all four (4) kilns, record the total production for Kilns 1 – 3 and the total production for Kiln 4 and use the following formula to demonstrate compliance with the NO_x limit:

$$\text{Tons of NO}_x \text{ emissions/month} = [(\text{tons of lime production from Kilns \#1, \#2, \& \#3}) \times (\text{EF}_3) + (\text{tons of lime production from Kiln \#4}) \times (\text{EF}_2)] \div 2000 \text{ lb/ton}$$

Where:

EF₃ = lb NO_x/ton of lime produced for the combined exhaust from kilns #1, #2, and #3. The combined exhaust shall be used to purge the tunnel at least 12 hours before conducting the stack test, and the lime produced during the test period shall be recorded.

- D. If the facility (plant number 82-01-015) intends on changing the method of demonstrating compliance with either the NO_x emission limit or the opacity monitoring requirements of Condition 6, the facility shall inform (in writing) the Compliance Supervisor of the Air Quality Bureau and the Field Office of its intentions thirty (30) days prior to making the change.
- E. The emission units listed in this permit are limited to coal, petroleum coke, and natural gas as fuels.

Authority for Requirement: DNR Construction Permit 73-A-219-S8

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 110

Stack Opening, (inches, dia.): 96

Exhaust Flow Rate (scfm): 125,000

Exhaust Temperature (°F): 108

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 73-A-219-S8

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 Emission Monitoring Systems (CEMS)

The facility (plant number 82-01-015) shall either:

- 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 for all periods when Kiln #4 is in operation in accordance with the New Source Performance Standards (NSPS) Subpart HH (Standards of Performance for Lime Manufacturing Plants). The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 1 (PS1) or
- Conduct opacity monitoring for those periods when Kiln #4 is in operation per an EPA approved alternative opacity monitoring program.

Authority for Requirement: DNR Construction Permit 73-A-219-S8
40 CFR 60 Subpart HH
567 IAC 23.1(2)"y"

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Stack Test ⁽¹⁾	One-Time Failed – 10/20/2023 Retested – 11/4/2024: Passed	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202

⁽¹⁾ Compliance demonstration is required for PM with the state limit of 0.51 lb/ton of lime in Condition 1.a.

Authority for Requirement: DNR Construction Permit 73-A-219-S8

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

CAM is required only when Kiln 4 is operating. Operating conditions listed above meet CAM requirements.

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: LP-4 (Future State)

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU K-3	Rotary Lime Kiln 3	CE-C3: Cyclone #3, followed by CE-TL1 Limestone Mining Tunnel	Coal, Petroleum Coke, Natural Gas	8.75 tons/hr	73-A-219-S9

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 73-A-219-S9
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 13.83 lb/hr

Authority for Requirement: DNR Construction Permit 73-A-219-S9

Pollutant: Particulate Matter (PM)

Emission Limit(s): 13.83 lb/hr 0.1 gr/scf

Authority for Requirement: DNR Construction Permit 73-A-219-S9
567 IAC 23.4(8)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.0 lb/hr, 0.6 lb/MMBtu⁽²⁾, 500 ppm_v⁽³⁾

Authority for Requirement: DNR Construction Permit 73-A-219-S9
567 IAC 23.3(3)"a"(3)
567 IAC 23.3(3)"e"

⁽²⁾Standard applies when Rotary Lime Kiln 3 fires either on only solid fuels or on a combination of fuels (solid and gaseous fuels).

⁽³⁾Standard applies when Rotary Lime Kiln 3 fires on only gaseous fuels.

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 12.70 lb/hr
Authority for Requirement: DNR Construction Permit 73-A-219-S9

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 1.31 lb/hr
Authority for Requirement: DNR Construction Permit 73-A-219-S9

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 10.10 lb/hr
Authority for Requirement: DNR Construction Permit 73-A-219-S9

Pollutant: Hydrochloric Acid (HCl)
Emission Limit(s): 0.35 lb/hr
Authority for Requirement: DNR Construction Permit 73-A-219-S9

Pollutant: Total HAP
Emission Limit(s): 1.10 lb/hr
Authority for Requirement: DNR Construction Permit 73-A-219-S9

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The owner or operator shall use the following fuels as the only fuels combusted in the Rotary Lime Kiln 3 (EU K-3). Solid Fuels: coal and petroleum coke. Gaseous fuel: natural gas.
 - (1) The owner or operator shall maintain a record of the type of fuels burned in the Rotary Lime Kiln 3 (EU K-3).
 - (2) Prior to burning any other fuels in the Rotary Lime Kiln 3 (EU K-3), the owner or operator shall apply for and obtain an amended construction permit from the Department.
- B. The owner or operator shall operate, inspect, and maintain the control equipment covered by this permit according to the manufacturer's specifications and instructions.
 - (1) The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment covered by this permit. At a minimum, this log shall include the date that any inspection and/or maintenance was performed; any issues identified during inspection and maintenance activities; and the date each issue was resolved.
- C. Whenever the Rotary Lime Kiln 3 (EU K-3) is in operation, the owner or operator shall take reasonable precautions to prevent the discharge of dust emissions beyond the lot line of the property.

D. To ensure the requested changes evaluated under Project Number 23-125 will cause a NO_x emissions increase that is below the PSD significance thresholds, the owner or operator shall restrict the stone feed throughput for the Rotary Lime Kiln 3 (EU K-3) to no more than 73,500 tons per 12-month rolling period.

- (1) The owner or operator shall maintain the following monthly records:
 - a. The amount, in tons, of the total stone feed throughput for the Rotary Lime Kiln 3 (EU K-3).
 - b. The rolling 12-month amount, in tons, of the total stone feed throughput for the Rotary Lime Kiln 3 (EU K-3).
- (2) The owner or operator shall install, calibrate, maintain, and operate a device for measuring the mass rate of lime products from the Rotary Lime Kiln 3 (EU K-3).

Authority for Requirement: DNR Construction Permit 73-A-219-S9

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft. from the ground): 110

Stack Opening (inches, dia): 96

Exhaust Flow Rate (scfm): 41,829

Exhaust Temperature (°F): 108

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 73-A-219-S9

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.

Compliance Demonstrations

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Stack Test	Initial	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M, Method 202
		One Time		
PM ₁₀ ⁽¹⁾	Stack Test	Initial	1 hour	40 CFR 51, Appendix M, Method 201A with 202
		One Time		
Opacity	Stack Test	Initial	1 hour	40 CFR 60, Appendix A, Method 9
		One Time		
NO _x	Stack Test	Initial	1 hour	40 CFR 60, Appendix A, Method 7E
		One Time		
CO	Stack Test	Initial	1 hour	40 CFR 60, Appendix A, Method 10
		One Time		

⁽¹⁾ The owner or operator may conduct stack testing for total particulate matter (*40 CFR 60, Appendix M, Method 5 and 40 CFR 51, Appendix M, Method 202*) to demonstrate compliance with the PM₁₀ emission limits listed above. Authority for Requirement: DNR Construction Permit 73-A-219-S9

If an initial stack test is specified in the “Compliance Demonstrations” table, the owner or the owner’s authorized agent shall demonstrate compliance with the emission limitations contained in Emission Limits above within the applicable time period specified below:

- Within 60 days after achieving the maximum production rate but not later than 180 days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.

Authority for Requirement: DNR Construction Permit 73-A-219-S9

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 24.108(3)

Emission Point ID Number: EP LP-40 (Future State)

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU K-4	Rotary Lime Kiln 4 (225 MMBtu/hr)	CE LP-40A: Baghouse CE LP-40B: Selective Noncatalytic Reduction System CE LP-40C: Lime Injection System	Coal, Petroleum Coke, Natural Gas,	21.875 tons/hr	23-A-169
EU LP-41	Elevator 431	CE LP-40A: Baghouse	Limestone	50 tons/hr	
EU LP-42	Conveyor 446			50 tons/hr	
EU LP-50	West Kiln Run Tank			900 tons/hr	
EU LP-51	East Kiln Run Tank			900 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): 15%

Authority for Requirement: DNR Construction Permit 23-A-169
567 IAC 23.1(2)"y"
40 CFR 60.342(a)(2)

Pollutant: PM₁₀

Emission Limit(s): 11.16 lb/hr

Authority for Requirement: DNR Construction Permit 23-A-169

Pollutant: Particulate Matter (PM) - Federal

Emission Limit(s): 0.60 lb/ton stone feed

Authority for Requirement: DNR Construction Permit 23-A-169
567 IAC 23.1(2)"y"
40 CFR 60.342(a)(2)

Pollutant: Particulate Matter (PM) - State

Emission Limit(s): 11.16 lb/hr, 0.1 gr/scf

Authority for Requirement: DNR Construction Permit 23-A-169
567 IAC 23.4(8)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 5.10 lb/hr, 0.6 lb/MMBtu⁽¹⁾, 500ppm_v⁽²⁾

Authority for Requirement: DNR Construction Permit 23-A-169

567 IAC 23.3(3)"a"(3)

567 IAC 23.3(3)"e"

⁽¹⁾ Standard applies when Rotary Lime Kiln 4 fires either on only solid fuels or on a combination of fuels (solid and gaseous fuels).

⁽²⁾ Standard applies when Rotary Lime Kiln 4 fires on only gaseous fuels.

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 31.70 lb/hr

Authority for Requirement: DNR Construction Permit 23-A-169

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 3.28 lb/hr

Authority for Requirement: DNR Construction Permit 23-A-169

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 25.20 lb/hr

Authority for Requirement: DNR Construction Permit 23-A-169

Pollutant: Hydrochloric Acid

Emission Limit(s): 1.80 lb/hr

Authority for Requirement: DNR Construction Permit 23-A-169

Pollutant: Total HAP

Emission Limit(s): 3.34 lb/hr

Authority for Requirement: DNR Construction Permit 23-A-169

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. Due to the changes evaluated under Project No. 23-125, the owner or operator shall decommission Rotary Lime Kiln 1 (EU K-1) and Rotary Lime Kiln 2 (EU K-2) within 180 days from the completion of the changes evaluated under Project No. 23-125. (Issued 10/11/2024)

- (1) The owner or operator shall record the date Rotary Lime Kiln 1 (EU K-1) and Rotary Lime Kiln 2 (EU K-2) are decommissioned.

General Requirements

- B. The owner or operator shall use the following fuels as the only fuels combusted in the Rotary Lime Kiln 4 (EU K-4). Solid Fuels: coal and petroleum coke. Gaseous fuel: natural gas.

- (1) The owner or operator shall maintain a record of the type of fuels burned in the Rotary Lime Kiln 4 (EU K-4).

- (2) Prior to burning any other fuels in the Rotary Lime Kiln 4 (EU K-4), the owner or operator shall apply for and obtain an amended construction permit from the

Department.

- C. To ensure the requested changes evaluated under Project Number 23-125 will cause a NO_x emissions increase that is below the PSD significance thresholds, the owner or operator shall restrict the stone feed throughput for the Rotary Lime Kiln 4 (EU K-4) to no more than 183,750 tons per 12-month rolling period.
- (1) The owner or operator shall maintain the following monthly records:
 - a. The amount, in tons, of the total stone feed throughput for the Rotary Lime Kiln 4 (EU K-4).
 - b. The rolling 12-month amount, in tons, of the total stone feed throughput for the Rotary Lime Kiln 4 (EU K-4).
 - (2) As indicated in 40 CFR §60.343(d) of Subpart HH, the owner or operator of a lime manufacturing plant subject to this subpart shall install, calibrate, maintain, and operate a device for measuring the mass rate of stone feed to the Rotary Lime Kiln 4 (EU K-4). The measuring device used shall be accurate to within ±5 percent of the mass rate over its operating range.
- D. The owner or operator shall operate, inspect, and maintain the control equipment covered by this permit according to the manufacturer's specifications and instructions.
- (1) The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment covered by this permit. At a minimum, this log shall include the date that any inspection and/or maintenance was performed; any issues identified during inspection and maintenance activities; and the date each issue was resolved.

Control Equipment Monitoring Requirements

Baghouse (CE LP-40A)

- E. The owner or operator shall either:
- (1) Install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the opacity of a representative portion of the gases discharged to the atmosphere from the Rotary Lime Kiln 4 (EU K-4).
- Or
- (2) Conduct opacity monitoring for those periods when the Rotary Lime Kiln 4 (EU K-4) is in operation per an EPA approved alternative opacity monitoring program.

Selective Noncatalytic Reduction System (CE LP-40B)

- F. The owner or operator shall operate the Selective Noncatalytic Reduction (SNCR) System (CE LP-40B) as necessary to meet the NO_x emission limit listed above.
- (1) The owner or operator shall record the amount of ammonia injected into the Rotary Lime Kiln 4 (EU K-4) on a continuous basis whenever the SNCR System (CE LP-40B) is operated.

Lime Injection System (CE LP-40C)

- G. The owner or operator shall operate the Lime Injection System (CE LP-40C) as necessary to meet the SO₂ emission limit listed above.
- (1) The owner or operator shall record the amount of lime injected into the Rotary Lime Kiln 4 (EU K-4) on a continuous basis whenever the Lime Injection System (CE LP-40C) is operated.

Authority for Requirement: DNR Construction Permit 23-A-169

Applicable NSPS Standards

EU ID	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
EU K-4	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
	HH	Standard of Performance for Lime Manufacturing Plants	Rotary Lime Kiln	23.1(2)“y”	§60.340 – §60.344

Authority for Requirement: DNR Construction Permit 23-A-169

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 140

Stack Opening, (inches, dia.): 60

Exhaust Flow Rate (scfm): 59,627

Exhaust Temperature (°F): 250-450*

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 23-A-169

*The temperature range depends on the product processed by Rotary Lime Kiln 4 (EU K-4). If it is determined that the kiln operates in such a manner as to cause an exhaust temperature outside of this range, then the owner or operator shall submit a permit application requesting to amend the permit.

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 Monitoring Systems (CMS)

The facility (plant number 82-01-015) 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 for all periods when the Rotary Lime Kiln 4 is in operation in accordance with the New Source Performance Standards (NSPS) Subpart HH (Standards of Performance for Lime Manufacturing Plants). The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 1 (PS1).

Or

(2) Conduct opacity monitoring for those periods when the Rotary Lime Kiln 4 (EU K-4) is in operation per an EPA approved alternative opacity monitoring program.

Authority for Requirement: DNR Construction Permit 23-A-169

Compliance Demonstrations

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – Federal	Stack Testing ⁽¹⁾	Initial	1 hour	40 CFR 60, Appendix A, Method 5
		One Time		
PM – State	Stack Testing ⁽²⁾	Initial	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M, Method 202
		One Time		
PM ₁₀ ⁽³⁾	Stack Testing ⁽²⁾	Initial	1 hour	40 CFR 51, Appendix M, Method 201A with 202
		One Time		
Opacity ⁽⁴⁾	Opacity Monitor	Continuous	1 hour	40 CFR 60, Appendix A, Method 9
NO _x	Stack Testing ⁽²⁾	Initial	1 hour	40 CFR 60, Appendix A, Method 7E
		One Time		
CO	Stack Testing ⁽²⁾	Initial	1 hour	40 CFR 60, Appendix A, Method 10
		One Time		

⁽¹⁾ The owner or operator shall conduct stack testing one time on EP LP-40 to demonstrate compliance with the Federal emission limit listed above.

⁽²⁾ The owner or operator shall conduct stack testing one time on EP LP-40 to demonstrate compliance with the applicable State emission limits listed above.

⁽³⁾ The owner or operator may conduct stack testing for total particulate matter (*40 CFR 60, Appendix M, Method 5 and 40 CFR 51, Appendix M, Method 202*) to demonstrate compliance with the PM₁₀ emission limit listed above.

⁽⁴⁾ Compliance with the opacity emission limit listed above shall be demonstrated through the use of a Continuous Opacity Monitoring System (COMS). See Continuous Monitoring Systems requirements above.

If an initial stack test is specified in the “Compliance Demonstrations” table, the owner or the owner’s authorized agent shall demonstrate compliance with the emission limitations contained in Emission Limits above within the applicable time period specified below:

- Within 60 days after achieving the maximum production rate but not later than 180 days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.

Authority for Requirements: DNR Construction Permit 23-A-169

Stack Testing:

Pollutant - NO_x

Sack Test to be Completed between (dates) – Between 18 months and 24months after completion of Construction permit required test.

Test Method - 40 CFR 60, Appendix A, Method 7E

Authority for Requirement - 567 IAC 24.108(3)

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

At this time, a CAM plan has not been submitted to the Department because construction has not been initiated and appropriate monitoring parameters have not yet been determined. The facility shall submit a CAM plan and Administrative modification at the time of startup to incorporate these changes.

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: LP-7

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
LP-7	Kiln Dust Tank and Loadout	CE LP-7: Baghouse	Lime Fines	80 tons/hr 1050 ton of lime, limestone & flyash	88-A-220-S5

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 88-A-220-S5
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.15 lb/hr

Authority for Requirement: DNR Construction Permit 88-A-220-S5

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.63 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 88-A-220-S5
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The maximum amount of product loaded out using lime kiln dust loadout shall not exceed 240 tons per 3-hr period.
 - i. The owner or operator shall maintain records of the amount of product loaded out every 3-hours, in tons.
- B. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition C. (shown below) by May 1, 2018.
 - i. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.

- C. The differential pressure drop across Baghouse (CE LP-7) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE LP-7). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE LP-7), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE LP-7) falls outside the range specified in Condition C. (above), the owner or operator shall investigate Baghouse (CE LP-7) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE LP-7) are not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE LP-7), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE LP-7).

Authority for Requirement: DNR Construction Permit 88-A-220-S5

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft. from the ground): 94

Stack Opening (inches): 12

Exhaust Flow Rate (scfm): 4,350

Exhaust Temperature (°F): 100

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 88-A-220-S5

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: LP-8

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity*	DNR Construction Permit
LP-8a	Tank 445	CE LP-8: Baghouse	Lime	500 tons	88-A-221-S10
LP-8b	Tank 446			500 tons	
LP-8c	Tank 447			500 tons	
LP-8d	Crusher			50 tons/hr	
LP-8e	Screen			50 tons/hr	
LP-8f	Briquetter			5 tons/hr	
LP-8g	Pneumatic Blower			25 tons/hr	
LP-8h	Tank 441			500 tons	
LP-8i	Scale #1 Loadout System			90 tons/hr	
LP-8j	Tank 446B			200 tons	

* Maximum rated capacity: 90 tons per hour.

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

Authority for Requirement: DNR Construction Permit 88-A-221-S10
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.94 lb/hr

Authority for Requirement: DNR Construction Permit 88-A-221-S10

Pollutant: Particulate Matter (PM)

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

Authority for Requirement: DNR Construction Permit 88-A-221-S10
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The maximum amount of lime loaded out using the truck loadout system shall not exceed 90 tons per hour averaged over 3-hr period.

- i. For each hour, the owner or operator shall maintain records of the amount of product loaded out in tons.
 - ii. The owner or operator shall maintain records of the 3-hour average of product loaded out in tons.
- B. The stack shall be raised to 105 feet from the ground within 90 days of permit issuance.
 - i. The owner or operator shall maintain a record of the completion date that stack EP LP-8 was increased to 105 feet from the ground.
- C. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition D. by May 1, 2018.
 - i. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.
- D. The differential pressure drop across Baghouse (CE LP-8) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE LP-8). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE LP-8), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE LP-8) falls outside the range specified in Condition D., the owner or operator shall investigate Baghouse (CE LP-8) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE LP-8) are not in operation.
- E. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE LP-8), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE LP-8). Authority for

Authority for Requirement: DNR Construction Permit 88-A-221-S10

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft., from the ground): 105
Stack Opening (inches, dia): 22
Exhaust Flow Rate (scfm): 5,500
Exhaust Temperature (°F): 100
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 88-A-221-S10

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 24.108(3)

Emission Point ID Number: LP-12

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity *
LP-12a	Hi-Cal Storage Bin	CE LP-12: Baghouse	Hi-Cal Lime	165 tons of ingredient
LP-12b	Pneumatic Blowers		Hi-Cal Lime	75 tons of ingredient/hour
LP-12c	Hi-Cal Storage Bin		Hi-Cal Lime	50 tons of ingredient
LP-12e	Flourspar Storage Bin		Flourspar	50 tons of ingredient
LP-12f	Cal-Aluminate Storage Bin		Calcium-Aluminate	75 tons of ingredient
LP-12g	Hi-Cal Storage Bin		Hi-Cal Lime	75 tons of ingredient
LP-3a	Bagging Tank Conveyor		Ingredients	75 tons of ingredient/hour
LP-3b	2-ton Bagger		Ingredients	20 tons of ingredient/hour

* Maximum Rated Capacity: 100 Tons of ingredients per hour
DNR Construction Permit 97-A-1084-S4

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 97-A-1084-S4
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.05 lb/hr

Authority for Requirement: DNR Construction Permit 97-A-1084-S4

Pollutant: Particulate Matter (PM)

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

Authority for Requirement: DNR Construction Permit 97-A-1084-S4
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The maximum amount of product conveyed to bagging shall not exceed 100 tons per hour averaged over 3-hr period.

- i. For each hour, the owner or operator shall maintain records of the amount of product loaded out in tons.
 - ii. The owner or operator shall maintain records of the 3-hour average the amount of product loaded out in tons.
- B. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition C (shown below) by May 1, 2018.
 - i. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.
- C. The differential pressure drop across Baghouse (CE LP-12) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE LP-12). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE LP-12), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE LP-12) falls outside the range specified in condition C (shown above), the owner or operator shall investigate Baghouse (CE LP-12) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE LP-12) are not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE LP-12), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE LP-12).

Authority for Requirement: DNR Construction Permit 97-A-1084-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft., from the ground): 65
Stack Opening (inches, dia.): 12
Exhaust Flow Rate (scfm): 3,600
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 97-A-1084-S4

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

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: LP-13

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	DNR Construction Permit
LP-13	Lime Rail Loadout System (Spout and belt#1)	CE LP-13: Baghouse	Lime	100 tons/hr	02-A-028-S5
LP-13A	Lime Rail Loading Conveyor			100 tons/hr	
LP-13B	Tank 445 Rail Conveyor			100 tons/hr	
LP-13C	Tank 446 Rail Conveyor			100 tons/hr	
LP-13D	Tank 446 Rail Conveyor			100 tons/hr	
LP-13E	Dolo to Rail Loadout Conveyor			100 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 02-A-028-S5
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.17 lb/hr

Authority for Requirement: DNR Construction Permit 02-A-028-S5

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.31 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 02-A-028-S5
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The maximum amount of lime loaded out using the rail loadout system shall not exceed 100 tons per hour averaged over 3-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of product loaded out in tons.
 - ii. The owner or operator shall maintain records of the 3-hour average of product

loaded out in tons.

- B. The stack shall be raised to 50 feet from the ground within 90 days after permit issuance.
 - i. The owner or operator shall maintain a record of the completion date that stack EP LP-13 was raised to 50 feet from the ground.
- C. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition D (shown below) by May 1, 2018.
 - i. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.
- D. The differential pressure drop across Baghouse (CE LP-13) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE LP-13). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE LP-13), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE LP-13) falls outside the range specified in condition D (shown above), the owner or operator shall investigate Baghouse (CE LP-13) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE LP-13) are not in operation.
- E. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE LP-13), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE LP-13).
- F. The owner or operator shall complete the modification of EP LP-13 to add the Dolo to Rail Loadout Conveyor (LP-13E) by May 31, 2018.
 - i. The owner or operator shall maintain a record of the completion date that the Dolo to Rail Loadout Conveyor (LP-13E) was added to EP LP-13.

Authority for Requirement: DNR Construction Permit 02-A-028-S5

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft., from the ground): 50
Stack Opening (inches): 10
Exhaust Flow Rate (scfm): 1,800
Exhaust Temperature (°F): 100
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 02-A-028-S5

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: LP-16

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity*	DNR Construction Permit
LP-6	Dolo Process Loading Spout	CE LP-16: Baghouse	Lime/ Dolomite	40 tons/hr	11-A-335-S3
LP-16B	Dolo Process Bins 5 bins combined			400 tons of lime	
LP-16C	Dolo Process Conveying (15 conveyors/screws/elevators)			45 tons/hr	
LP-16S	Dolo Process Screener and Crusher (screener, Briquetter and crusher)			45 tons/hr	

* Maximum Rated Capacity: 90,000 lbs per hour of dolomite

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 11-A-335-S3
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.82 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-335-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.82 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 11-A-335-S3
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The maximum production rate of dolo processing system shall not exceed 90,000 pounds per hour averaged over 6-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of

- product loaded, using the belt scale, in pounds.
 - ii. The owner or operator shall maintain records of the 6-hour average of product loaded, using the belt scale, in pounds.
 - B. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition C (shown below) by May 1, 2018.
 - i. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.
 - C. The differential pressure drop across Baghouse (CE LP-16) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE LP-16). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE LP-16), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE LP-16) falls outside the range specified in condition C (shown above), the owner or operator shall investigate Baghouse (CE LP-16) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE LP-16) are not in operation.
 - D. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE LP-16), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE LP-16).

Authority for Requirement: DNR Construction Permit 11-A-335-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft. from the ground): 60
Stack Opening (inches): 24
Exhaust Flow Rate (scfm): 9,000
Exhaust Temperature (°F): 90
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 11-A-335-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 24.108(3)

Emission Point ID Number: LP-17

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity *	DNR Construction Permit
LP-17	Dolo Truck Loading Spout	CE LP-17: Baghouse	Lime/ Dolomite	100 tons/hr	11-A-336-S3
LP-17-1	Dolo Loadout Conveyor #1 (Rail & Truck)			100 tons/hr	
LP-17-2	Dolo Loadout Conveyor #2			100 tons/hr	
LP-17-4	Bathtub Bins (5 total)			80 tons/hr	
LP-1Q	C352 Dolo Belt to Loadout			50 tons/hr	
LP-1R	C353 Dolo Drag Conveyor			50 tons/hr	

* Maximum Rated Capacity: 100 tons of dolomite per hour

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

Authority for Requirement: DNR Construction Permit 11-A-336-S3
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.94 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-336-S3

Pollutant: Particulate Matter (PM)

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

Authority for Requirement: DNR Construction Permit 11-A-336-S3
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The maximum amount of dolo loaded out using the dolo loadout system shall not exceed 100 tons per hour averaged over 6-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of product loaded out in tons.

- ii. The owner or operator shall maintain records of the 6-hour average of product loaded out in tons.
- B. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition C (shown below) by May 1, 2018.
 - i. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.
- C. The differential pressure drop across Baghouse (CE LP-17) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE LP-17). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE LP-17), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE LP-17) falls outside the range specified in condition C (shown above), the owner or operator shall investigate Baghouse (CE LP-17) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE LP-17) are not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE LP-17), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE LP-17).
- E. The owner or operator shall decommission loadout EP LP-17B (Bathtub) by May 1, 2018.
 - i. The owner or operator shall maintain a record of the date when EP LP-17B was decommissioned from use.

Authority for Requirement: DNR Construction Permit 11-A-336-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height (ft. from the ground): 90
- Stack Opening (inches): 36
- Exhaust Flow Rate (scfm): 6,400
- Exhaust Temperature (°F): 200
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: DNR Construction Permit 11-A-336-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 24.108(3)

Emission Point ID Number: Solid Fuel-01

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
Solid Fuel-01	Solid Fuel Pile	Hoop Building (83% enclosure)	Solid Fuel (Coal)	61,000 TPY of Solid Fuel	17-A-504-S1

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): See Footnote ⁽¹⁾

Authority for Requirement: DNR Construction Permit 17-A-504-S1
567 IAC 23.3(2)"c"

⁽¹⁾ The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Pollutant: PM₁₀

Emission Limit(s): 0.0079 lbs/day ⁽²⁾

Authority for Requirement: DNR Construction Permit 17-A-504-S1

⁽²⁾ The limit for PM₁₀ emissions is established at 0.0079 pounds of PM₁₀ per day estimated using 10.18% moisture for the pile.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The maximum amount of solid fuel stored in the solid fuel pile shall not exceed 61,000 tons per rolling 12-month period.
 - i. The owner or operator shall maintain monthly records of the amount of solid fuel stored in the solid fuel pile. Calculate and record the 12-month rolling totals.
- B. The owner or operator shall check for visible emissions from the solid fuel pile (EP Solid Fuel-01) once per day at a time while the pile is in use. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from solid fuel pile, the owner or operator shall investigate the enclosure. The owner or operator shall maintain a record of all corrective actions taken.
- C. The owner or operator shall develop an operating and maintenance plan for the building structure, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- D. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the building structure.

Authority for Requirement: DNR Construction Permit 17-A-504-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 24.108(3)

Emission Point ID Number: LP-20

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
LP-20	LP-20	Solid Fuel Hopper	Solid Fuel	70 TPH of Solid Fuel; 300 Tons Per day of Solid Fuel; 61,000 TPY of Solid Fuel	17-A-459-S1

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 17-A-495-S1
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.02 lbs/hr

Authority for Requirement: DNR Construction Permit 17-A-495-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.04 lbs/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-495-S1
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The maximum amount of solid fuel transferred through the hopper shall not exceed 70 tons per hour
 - i. For each hour, the owner or operator shall maintain records of the amount of product transferred in tons.
 - ii. The owner or operator shall maintain hourly records of the product transferred in tons.
- B. The maximum amount of solid fuel transferred through the hopper shall not exceed 300 tons per day.
 - i. For each day, the owner or operator shall maintain records of the amount of solid

- fuel transferred through the hopper in tons.
- ii. The owner or operator shall maintain daily records of the solid fuel transferred in tons.
- C. The owner or operator shall check for visible emissions from Solid Fuel Hopper (EP LP-20) once per day at a time while Solid Fuel Hopper (EP LP-20) is in operation. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from Solid Fuel Hopper (EP LP-20), the owner or operator shall investigate the emission unit or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Solid Fuel Hopper (EP LP-20) is not in operation.

Authority for Requirement: DNR Construction Permit 17-A-495-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 24.108(3)

Emission Point ID Number: LP-39

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
LP-39	Solid Fuel Crusher	CE LP-39: Baghouse	Solid Fuel	20 tons per hour*	17-A-505-S2
LP-39A	Crusher Burner			7 MMBtu per hour	

* Process design capacity: 11 tons per hour

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

Authority for Requirement: DNR Construction Permit 17-A-505-S2
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.86 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-505-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.86 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-505-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: DNR Construction Permit 17-A-505-S2
567 IAC 23.3(3)

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The maximum amount of solid fuel crushed in the crusher shall not exceed 11 tons per hour averaged over 3-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of solid fuel crushed in tons.
 - ii. The owner or operator shall maintain records of the 3-hour average of solid fuel crushed in tons.
- B. The burner shall be fueled by natural gas only.
 - i. The owner or operator shall maintain records of the type of fuel combusted in the burner.
- C. The facility shall not crush any other fuel besides coke/coal in the fuel crusher.
 - ii. The owner or operator shall maintain records of the type of fuel crushed in the crusher.
- D. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition E. by May 1, 2018.
 - iii. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.
- E. The differential pressure drop across Baghouse (CE LP-39) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - iv. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE LP-39). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - v. The owner or operator shall collect and record the pressure drop across Baghouse (CE LP-39), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE LP-39) falls outside the range specified in Condition E., the owner or operator shall investigate Baghouse (CE LP-39) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE LP-39) are not in operation.
- F. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE LP-39), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - vi. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE LP-39).

Authority for Requirement: DNR Construction Permit 17-A-505-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft. from the ground): 50
Stack Opening (inches): 21
Exhaust Flow Rate (scfm): 6,500
Exhaust Temperature (°F): 175
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 17-A-505-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 24.108(3)

Emission Point ID Number: LP-24

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
LP-21	Kilns Solid Fuel Conveyor	Solid Fuel (Coal)	70 TPH; 300 Tons Per day of Solid Fuel	17-A-494-S1
LP-25	Kilns Solid Fuel Tank		300 Tons Per day of Solid Fuel	

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 17-A-494-S1
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.08 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-494-S1

Pollutant: Particulate Matter (PM)

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

Authority for Requirement: DNR Construction Permit 17-A-494-S1
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The maximum amount of solid fuel conveyed through the conveyor shall not exceed 70 tons per hour.
 - i. For each hour, the owner or operator shall maintain records of the amount of solid fuel conveyed through the conveyor in tons.
 - ii. The owner or operator shall maintain hourly records of the solid fuel conveyed in tons.
- B. The maximum amount of solid fuel conveyed through the conveyor shall not exceed 300 tons per day. The maximum amount of solid fuel stored in the tank shall not exceed 300 tons per day.

- i. For each day, the owner or operator shall maintain records of the amount of solid fuel conveyed through the conveyor in tons and stored in the tank in tons.
 - ii. The owner or operator shall maintain daily records of the solid fuel conveyed and stored in tons.
- C. The owner or operator shall check for visible emissions from Solid Fuel Conveyor (EP LP-24) once per day at a time while Solid Fuel Conveyor (EP LP-24) is in operation. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from Solid Fuel Conveyor (EP LP-24), the owner or operator shall investigate the emission unit or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Solid Fuel Conveyor (EP LP-24) is not in operation.

Authority for Requirement: DNR Construction Permit 17-A-494-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft. from the ground): 70

Stack Opening (inches): 32 x 32

Exhaust Flow Rate (scfm): 11.7

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 17-A-494-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 24.108(3)

Emission Point ID Number: LP-36

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
LP-36	Kiln # 3 Rockbox Conveyor	Limestone	70 tons/hr	17-A-491
LP-37	Kiln # 3 Rockbox		70 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 17-A-491
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.08 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-491

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.21 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-491
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The maximum amount of product conveyed using kiln#3 conveyor shall not exceed 70 tons per hour averaged over 3-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of product conveyed in tons.
 - ii. The owner or operator shall maintain records of the 3-hour average the amount of product conveyed in tons.
- B. The owner or operator shall check for visible emissions from Kiln #3 Rockbox and Conveyor (EP LP-36) once per week at a time while Kiln #3 Rockbox and Conveyor (EP LP-36) is in operation. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator

observes visible emissions from Kiln #3 Rockbox and Conveyor (EP LP-36), the owner or operator shall investigate the emission unit or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Kiln #3 Rockbox and Conveyor (EP LP-36) is not in operation.

Authority for Requirement: DNR Construction Permit 17-A-491

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft. from the ground): 76

Stack Opening (inches): 32 x 32

Exhaust Flow Rate (scfm): 290

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 17-A-491

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 24.108(3)

Emission Point ID Number: LP-38

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
LP-38	Kiln #1, 2 Rockbox Conveyor	Limestone	55 tons/hr	17-A-492-S1
LP-52	Kiln #1 Rockbox		55 tons/hr	
LP-40	Kiln #2 Rockbox		55 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 17-A-492-S1
567 IAC 23.3(2)"d"

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

Pollutant: PM₁₀

Emission Limit(s): 0.061 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-492-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.165 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-492-S1
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The maximum amount of product conveyed using Kiln #1, 2 Rockbox Conveyor shall not exceed 55 tons per hour averaged over 3-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of product conveyed in tons.
 - ii. The owner or operator shall maintain records of the 3-hour average the amount of product conveyed in tons.
- B. The owner or operator shall check for visible emissions from Kiln #1 & #2 Rockbox and Conveyor (EP LP-38) once per week at a time while Kiln #1 & #2 Rockbox and Conveyor (EP LP-38) is in operation. The owner or operator shall record the date and

time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from Kiln #1 & #2 Rockbox and Conveyor (EP LP-38), the owner or operator shall investigate the emission unit or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Kiln #1 & #2 Rockbox and Conveyor (EP LP-38) is not in operation.

Authority for Requirement: DNR Construction Permit 17-A-492-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft. from the ground): 76

Stack Opening (inches): 32 x 32

Exhaust Flow Rate (scfm): 80

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 17-A-492-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 24.108(3)

Emission Point ID Number: Q-1

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
Q-1	Primary Crushing	WSQ1: Water Suppression	Limestone	700 tph	11-A-337-S1
Q-1C1	Conveyor #1			700tph	
Q-1C2	Stacker & Pile 6 (in pit)			26,685 ft ²	

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 for Q-1 (Crusher) and Q-1C1 (Conveyor #1)

Emission Limit(s): Fugitive ⁽¹⁾

Authority for Requirement: DNR Construction Permit 11-A-337-S1
567 IAC 23.3(2)"c"

⁽¹⁾The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Pollutant: Opacity for Q-1C2 (Stacker & Pile 6)

Emission Limit(s): Fugitive ⁽¹⁾

Authority for Requirement: DNR Construction Permit 11-A-337-S1
567 IAC 23.3(2)"c"

⁽¹⁾The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Pollutant: Opacity for NSPS OOO, Q-1 Stacker

Emission Limit(s): 7% ⁽²⁾

Authority for Requirement: DNR Construction Permit 11-A-337-S1
567 IAC 23.1(2)"bbb"
40 CFR 60 Subpart OOO

⁽²⁾Limit established per Table 3 of Subpart OOO Part 60.

Pollutant: PM₁₀ for Q-1 (Crusher) and Q-1C1 (Conveyor #1)

Emission Limit(s): 9.84 lbs/day

Authority for Requirement: DNR Construction Permit 11-A-337-S1

Pollutant: PM₁₀ for Q-1C2 (Stacker & Pile 6)

Emission Limit(s): 10.64 lbs/day

Authority for Requirement: DNR Construction Permit 11-A-337-S1

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The owner or operator shall operate water suppression system when visible emissions from processing units Q-1 Crusher, Q-1 Conveyor#1 or Q-1 Stacker are observed.
- B. The owner or operator shall check for visible emissions each time the processing units Q-1 Crusher, Q-1 Conveyor#1 and Q-1 Stacker are in operation. This requirement shall not apply on the days that processing units Q-1 Crusher, Q-1 Conveyor#1 and Q-1 Stacker are 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 the owner or operator observes visible emissions during operation of processing units Q-1 Crusher, Q-1 Conveyor#1 and Q-1 Stacker, the owner or operator shall investigate the emission unit, or the operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken.
- C. The owner or operator shall develop an operating and maintenance plan for the water suppression system, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the water suppression system.
- D. The owner or operator shall maintain the total area of Pile 6 to less than or equal to 26,685 square feet.
 - i. The owner or operator shall maintain annual record of Pile 6 area in square feet.
- E. During high wind episodes (greater than 16 miles per hour) if visible emissions are observed from the working face of Pile 6, the owner or operator shall employ measures to eliminate or minimize emissions. Such measures may include applying dust suppressant to working face of the pile or coverings the working face of the pile.
 - i. The owner or operator shall develop a written plan to implement, at a minimum, measures to minimize emissions during high wind episodes as specified in condition E. The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.
- F. The owner or operator shall comply with the requirements per 40 CFR §60.670 through §60.676 for Q-1 Stacker.

Authority for Requirement: DNR Construction Permit 11-A-337-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 24.108(3)

Emission Point ID Number: Q-2LP

Associated Equipment

Q-2LP Secondary Crushing/Screening – Lower Plant

Emission Unit	Raw Material	Maximum Capacity	Construction Permit
LP1 Belt	Limestone	400 tons per hour	18-A-112-S2
LP1 Screen		400 tons per hour	
LP1 Crusher		100 tons per hour	
LP6 Belt		100 tons per hour	
LP9 Belt		100 tons per hour	
LP4A Belt		75 tons per hour	
LP2 screen		100 tons per hour	
LP4 Stacker		75 tons per hour	
LP3 Stacker		125 tons per hour	
LP5 Stacker		40 tons per hour	
LP8 Stacker		60 tons per hour	
Pile 7 (In Pit)		Maximum Pile Area: 19,461 ft ²	
Pile 9 (In Pit)		Maximum Pile Area: 123,623 ft ²	

Maximum Design Capacity: 300 TPH

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.

Emission Limits (Q-2LP Crusher, Belts and Screens)

Pollutant: Opacity

Emission Limit: Fugitive Dust ⁽¹⁾

Authority for Requirement: DNR Construction Permit 18-A-112-S2
567 IAC 23.3(2)"c"

⁽¹⁾The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Pollutant: PM₁₀

Emission Limit(s): 127.92 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-112-S2

Emission Limits (Stackers, Pile 7, and Pile 9)

Pollutant: Opacity

Emission Limit: Fugitive Dust ⁽¹⁾

Authority for Requirement: DNR Construction Permit 18-A-112-S2
567 IAC 23.3(2)"c"

⁽¹⁾The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Pollutant: PM₁₀
Emission Limit(s): 10.74 lbs/day
Authority for Requirement: DNR Construction Permit 18-A-112-S2

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The owner or operator shall conduct daily visible emissions observations on each emission unit covered by this permit. This requirement shall not apply to any emission unit in this permit that is not in operation.
 - (1) The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions.
 - (2) If visible emissions from any of the emission units covered by this permit are observed, the owner or operator shall investigate the affected emission units and make corrections to the associated operation or equipment.
 - (3) The owner or operator shall maintain a record of all corrective actions taken.
- B. The total area of Pile 7 shall not exceed 19,461 square feet.
 - (1) The owner or operator shall maintain annual records of the total Pile 7 area, in square feet.
- C. The total area of Pile 9 shall not exceed 123,623 square feet.
 - (1) The owner or operator shall maintain annual records of the total Pile 9 area, in square feet.
- D. During high wind episodes (greater than 16 miles per hour), if visible emissions are observed from the working face of Pile 7 or Pile 9, the owner or operator shall employ measures to eliminate or minimize emissions. Such measures may include applying dust suppressant to the working face of the pile or covering the working face of the pile.
 - (1) The owner or operator shall develop a written plan to implement, at a minimum, measures to minimize emissions during high wind episodes as specified in Permit Condition D.
 - a. 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 18-A-112-S2

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: Q-2TP

Associated Equipment

Q-2TP Secondary Crushing/Screening – Top Plant

Emission Unit	Control Equipment	Raw Material	Maximum Capacity	Construction Permit
TP1a Belt	CE Q-2TP: Water Suppression	Limestone	400 tons/hr	18-A-113
TP1b Belt			400 tons/hr	
TP2 Belt			425 tons/hr	
TP1 N Screen			212 tons/hr	
TP1 S Screen			213 tons/hr	
TP3 Crusher Belt			25 tons/hr	
TP1 Crusher			25 tons/hr	
TP4 Crusher Return Belt			25 tons/hr	
TP6 Cross Belt			325 tons/hr	
TP8 Belt			325 tons/hr	
TP3 West Screen			150 tons/hr	
TP4 East Screen			175 tons/hr	
TP9 Belt			125 tons/hr	
TP11 Belt			125 tons/hr	
TP14 Belt Washer			100 tons/hr	
TP12 Belt			50 tons/hr	
TP17 Belt			50 tons/hr	
TP6 PEP Screen				
TP5 Sugarbeet Stacker	None		100 tons/hr	
TP16 Belt Stacker (wet material processed)	None		100 tons/hr	
TP18 Stacker (wet material processed)	None		25 tons/hr	
TP19 Stacker (wet material processed)	None		25 tons/hr	
Pile 4	None		Maximum Pile Area: 47,468 ft ²	

Rated Capacity: 400 TPH, Recycle Rate 25 TPH

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.

Emission Limits (Q2TP equipment)

Pollutant: Opacity

Emission Limit: Fugitive Dust ⁽¹⁾

Authority for Requirement: DNR Construction Permit 18-A-113

567 IAC 23.3(2)"c"

⁽¹⁾The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Pollutant: PM₁₀

Emission Limit(s): 18.96 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-113

Emission Limits (Stackers and Pile 4)

Pollutant: Opacity

Emission Limit: Fugitive Dust ⁽²⁾

Authority for Requirement: DNR Construction Permit 18-A-113
567 IAC 23.3(2)"c"

⁽²⁾The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Pollutant: PM₁₀

Emission Limit(s): 13.44 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-113

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The owner or operator shall operate water suppression system when visible emissions from processing units listed in associated equipment table above are observed.
- B. The owner or operator shall check for visible emissions each time the processing units listed in associated equipment table above are in operation. This requirement shall not apply on the days that processing units listed in above are 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 the owner or operator observes visible emissions during operation of processing units listed in associated equipment table above, the owner or operator shall investigate the emission unit, or the operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken.
- C. The owner or operator shall develop an operating and maintenance plan for the water suppression system, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the water suppression system.
- D. The owner or operator shall maintain the total area of Pile 4 to less than or equal to 47,468 square feet.
 - i. The owner or operator shall maintain annual records of Pile 4 area in square feet.
- E. The average active surface moisture content for the material storage pile 4 shall be greater than or equal to 2.1% by weight.
 - i. The owner or operator shall sample the active surface of storage pile 4 to determine moisture content as percent by weight once per calendar quarter.

- ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average moisture content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured moisture content as percent weight d); The average moisture content as percent by weight and e) The operator's initials
- F. The average active surface silt from the material storage pile 4 shall be less than or equal to 3.9% by weight.
 - i. The owner or operator shall sample the active surface of storage pile 4 to determine silt content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average silt content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured silt content as percent weight d); The average silt content as percent by weight and e) The operator's initials.
- G. During high wind episodes (greater than 12 miles per hour) if visible emissions are observed from the working face of Pile 4 the owner or operator shall employ measures to eliminate or minimize emissions. Such measures may include applying dust suppressant to working face of the pile or coverings the working face of the pile.
 - i. The owner or operator shall develop a written plan to implement, at a minimum, measures to minimize emissions during high wind episodes as specified in condition G. The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.
- H. The owner or operator shall only process wet material in TP16 Belt Stacker, TP18 Stacker, and TP19 Stacker.
 - i. The owner or operator shall maintain a record if non-wet material is processed in TP16 Belt Stacker, TP18 Stacker, and TP19 Stacker.

Authority for Requirement: DNR Construction Permit 18-A-113

Monitoring Requirements

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

Compliance Demonstration(s)

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM ₁₀	Active Surface Silt & Moisture Sampling	Quarterly	NA	AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading, Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples

Authority for Requirement: DNR Construction Permit 18-A-113

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 24.108(3)

Emission Point ID Number: Pile 1

Associated Equipment

Emission Unit	Raw Material	Maximum Capacity	Construction Permit
Pile 1	Limestone	Maximum Pile Area: 80,318 ft ²	18-A-114-S1

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: Fugitive Dust ⁽¹⁾

Authority for Requirement: DNR Construction Permit 18-A-114-S1
567 IAC 23.3(2)"c"

⁽¹⁾The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Pollutant: PM₁₀

Emission Limit(s): 8.65 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-114-S1

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The owner or operator shall maintain the total area of Pile 1 to less than or equal to 80,318 square feet.
 - i. The owner or operator shall maintain annual records of Pile 1 area in square feet.
- B. The average active surface moisture content for the material storage pile 1 shall be greater than or equal to 1.2% by weight.
 - i. The owner or operator shall sample the active surface of storage pile 1 to determine moisture content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average moisture content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured moisture content as percent weight d); The average moisture content as percent by weight and e) The operator's initials.
 - v. If the measured moisture content is below the minimum value, the owner or operator shall take immediate corrective action measures to add moisture to the

working face of the pile. Such measures shall include applying dust suppressant or water to the working face of the pile. The owner or operator shall maintain a record of all corrective actions taken. The owner or operator shall continue corrective measures until the measured moisture content is returned above the minimum value.

- C. The average active surface silt from the material storage pile 1 shall be less than or equal to 0.23% by weight.
 - i. The owner or operator shall sample the active surface of storage pile 1 to determine silt content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average silt content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured silt content as percent weight d); The average silt content as percent by weight and e) The operator's initials.
- D. During high wind episodes (greater than 12 miles per hour) if visible emissions are observed from the working face of Pile 1, the owner or operator shall employ measures to eliminate or minimize emissions. Such measures may include applying dust suppressant to working face of the pile or covering the working face of the pile.
 - i. The owner or operator shall develop a written plan to implement, at a minimum, measures to minimize emissions during high wind episodes as specified in condition D. 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 18-A-114-S1

Monitoring Requirements

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

Compliance Demonstration(s)

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM ₁₀	Active Surface Silt & Moisture Sampling	Quarterly	NA	AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading, Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples

Authority for Requirement: DNR Construction Permit 18-A-114

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 24.108(3)

Emission Point ID Number: Pile 8

Associated Equipment

Emission Unit	Raw Material	Maximum Capacity	Construction Permit
Pile 8	Washed Limestone	Maximum Pile Area: 183,860 ft ²	18-A-115

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: Fugitive Dust ⁽¹⁾

Authority for Requirement: DNR Construction Permit 18-A-115
567 IAC 23.3(2)"c"

⁽¹⁾ The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property. (See Plant-Wide Conditions).

Pollutant: PM₁₀

Emission Limit(s): 3.82 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-115

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The owner or operator shall maintain the total area of Pile 8 to less than or equal to 183,860 square feet.
 - i. The owner or operator shall maintain annual records of Pile 8 area in square feet.
- B. The owner or operator shall store washed rocks only in Pile 8.
 - i. The owner or operator shall maintain records of type of rock stored in Pile 8.
- C. During high wind episodes (greater than 12 miles per hour) if visible emissions are observed from the working face of Pile 8, the owner or operator shall employ measures to eliminate or minimize emissions. Such measures may include applying dust suppressant to working face of the pile or coverings the working face of the pile.
 - i. The owner or operator shall develop a written plan to implement at a minimum measures to minimize emissions during high wind episodes as specified in condition C (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 18-A-115

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 24.108(3)

Emission Point ID Number: Pile 14

Associated Equipment

Emission Unit	Raw Material	Maximum Capacity	Construction Permit
Pile 14	Limestone	Maximum Pile Area: 347,974 ft ²	18-A-116-S1

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: Fugitive Dust ⁽¹⁾

Authority for Requirement: DNR Construction Permit 18-A-116-S1
567 IAC 23.3(2)"c"

⁽¹⁾ The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property. (see Plant-Wide Conditions).

Pollutant: PM₁₀

Emission Limit(s): 6.4 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-116-S1

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The owner or operator shall maintain the total area of Pile 14 to less than or equal to 347,974 square feet.
 - i. The owner or operator shall maintain annual records of Pile 14 area in square feet.
- B. The average active surface moisture content for the material storage pile 14 shall be greater than or equal to 1.4% by weight.
 - i. The owner or operator shall sample the active surface of storage pile 14 to determine moisture content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average moisture content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured moisture content as percent weight d); The average moisture content as percent by weight and e) The operator's initials
- C. The average active surface silt from the material storage pile 14 shall be less than or equal to 1.04% by weight.

- i. The owner or operator shall sample the active surface of storage pile 14 to determine silt content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average silt content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured silt content as percent weight d); The average silt content as percent by weight and e) The operator's initials.
- D. During high wind episodes (greater than 12 miles per hour) if visible emissions are observed from the working face of Pile 14, the owner or operator shall employ measures to eliminate or minimize emissions. Such measures may include applying dust suppressant to working face of the pile or coverings the working face of the pile.
- i. The owner or operator shall develop a written plan to implement at a minimum measures to minimize emissions during high wind episodes as specified in condition D (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 18-A-116-S1

Monitoring Requirements

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

Compliance Demonstration(s)

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM ₁₀	Active Surface Silt & Moisture Sampling	Quarterly	NA	AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading, Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples

Authority for Requirement: DNR Construction Permit 18-A-116-S1

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 24.108(3)

Emission Point ID Number: Pile A

Associated Equipment

Emission Unit	Control Equipment	Raw Material	Load-In/Load-Out (Moisture %)	Wind Erosion (Silt Loading %)	Area ⁽¹⁾ (ft ²)	Throughput (tpy)	Construction Permit
Pile Barge	NA	Limestone	2.0	3.9	244,618	600,000	18-A-117-S2
Pile B ⁽²⁾	Water Suppression (75%) Wind Screen (50%)		0.5	0.56	131,097	650,000	
Pile E	Wind Screen (50%)		1.5	3.95	240,554	500,000	
Pile H	NA		2.1	3.9	116,627	20,000	

⁽¹⁾ 5% of are of each pile is active working face

⁽²⁾ Pile B includes the following units:

- Kiln 4 Screener (LP-29) (Rated 50.31 tons per hour) [95% enclosed]
- Kiln 1, 2, 3 Screener (LP-35) (Rated 43.13 tons per hour) [95% enclosed]
- Stackers under (LP-30) (Rated 50.31 tons per hour)
- Conveyor (LP-34) (Rated 43.13 tons per hour)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: Fugitive Dust ⁽¹⁾

Authority for Requirement: DNR Construction Permit 18-A-117-S2
567 IAC 23.3(2)"c"

⁽¹⁾The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property. (see Plant-Wide Conditions).

Pollutant: PM₁₀

Emission Limit(s): 180.0 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-117-S2

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The owner or operator shall maintain the area of merged Pile A (includes Barge, B, E, and H Piles), in square feet to less than or equal to 1,729,849.
 - i. The owner or operator shall maintain annual records of pile area in square feet.

- B. The owner or operator shall maintain the throughput of Pile B in tons, on a daily basis, to less than or equal to 2238.
 - i. The owner or operator shall maintain daily records of pile throughput in tons.
- C. The owner or operator shall maintain the throughput of Pile E in tons, on a daily basis, to less than or equal to 2640.
 - i. The owner or operator shall maintain daily records of pile throughput in tons.
- D. The owner or operator shall install a wind screen on 5 loadout hoppers within Pile B and Pile E by October 1, 2018.
 - i. The owner or operator shall maintain a record of the date when installation of wind screen is completed.
- E. The owner or operator shall maintain the wind screen in a manner to minimize emissions and achieve 50 percent reduction in emissions due to loadout of material from Pile B and Pile E loadout hopper. The wind screen shall at minimum be enclosed on three sides, at a height of 5 feet above the hopper and maintained in good working order.
 - i. The owner or operator shall develop an operating and maintenance plan for the Pile B and Pile E loadout hopper wind screen, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pile B and Pile E loadout hopper windscreen.
- F. The owner or operator shall operate water suppression system when visible emissions from processing units located in Pile B are observed except when 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 conditions.
- G. The owner or operator shall check for visible emissions each time the processing units located in Pile B are in operation. This requirement shall not apply on the days that processing units located in Pile B are 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 the owner or operator observes visible emissions, the owner or operator shall investigate the emission unit, or the operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken.
- H. The owner or operator shall develop an operating and maintenance plan for the water suppression system, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the water suppression system.
- I. The owner or operator shall check for visible emissions from the equipment operating within Pile Barge and Pile E once per day at a time while the equipment is in use.
 - i. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the equipment with the piles, the owner or operator shall investigate the emission unit or operations associated with the emission unit and

make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that processing units located within the pile are not in operation.

- J. During high wind episodes (greater than 12 miles per hour) if visible emissions are observed from the working face of Pile Barge, Pile B, Pile E, or Pile H, the owner or operator shall employ measures to eliminate or minimize emissions. Such measures shall include applying dust suppressant to working face of the pile or coverings the working face of the pile.
 - i. The owner or operator shall develop a written plan to implement, at a minimum, measures to minimize emissions during high wind episodes as specified in condition J. The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.
- K. The average active surface moisture content for the material storage pile Barge shall be greater than or equal to 2.0% by weight.
 - i. The owner or operator shall sample the active surface of storage pile Barge to determine moisture content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average moisture content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured moisture content as percent weight d); The average moisture content as percent by weight and e) The operator's initials
 - v. If the measured moisture content is below the minimum value, the owner or operator shall take immediate corrective action measures to add moisture to the working face of the pile. Such measures shall include applying dust suppressant or water to the working face of the pile. The owner or operator shall maintain a record of all corrective actions taken. The owner or operator shall continue corrective measures until the measured moisture content is returned above the minimum value.
- L. The average active surface silt from the material storage pile Barge shall be less than or equal to 3.9% by weight.
 - i. The owner or operator shall sample the active surface of storage pile Barge to determine silt content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average silt content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured silt content as percent weight d); The average silt content as percent by weight and e) The operator's initials.
- M. The average active surface moisture content for the material storage pile B shall be greater than or equal to 0.5% by weight.

- i. The owner or operator shall sample the active surface of storage pile B to determine moisture content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average moisture content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured moisture content as percent weight d); The average moisture content as percent by weight and e) The operator's initials
 - v. If the measured moisture content is below the minimum value, the owner or operator shall take immediate corrective action measures to add moisture to the working face of the pile. Such measures shall include applying dust suppressant or water to the working face of the pile. The owner or operator shall maintain a record of all corrective actions taken. The owner or operator shall continue corrective measures until the measured moisture content is returned above the minimum value.
- N. The average active surface silt from the material storage pile B shall be less than or equal to 0.56% by weight.
- i. The owner or operator shall sample the active surface of storage pile B to determine silt content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average silt content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured silt content as percent weight d); The average silt content as percent by weight and e) The operator's initials.
- O. The average active surface moisture content for the material storage pile E shall be greater than or equal to 1.5% by weight.
- i. The owner or operator shall sample the active surface of storage pile E to determine moisture content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average moisture content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured moisture content as percent weight d); The average moisture content as percent by weight and e) The operator's initials
 - v. If the measured moisture content is below the minimum value, the owner or operator shall take immediate corrective action measures to add moisture to the working face of the pile. Such measures shall include applying dust suppressant or water to the working face of the pile. The owner or operator shall maintain a record of all corrective actions taken. The owner or operator shall continue

corrective measures until the measured moisture content is returned above the minimum value.

- P. The average active surface silt from the material storage pile E shall be less than or equal to 3.95% by weight.
- i. The owner or operator shall sample the active surface of storage pile E to determine silt content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average silt content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured silt content as percent weight d); The average silt content as percent by weight and e) The operator's initials.
- Q. Beginning June 30, 2019, the owner or operator shall maintain Pile Barge, Pile B, and Pile E a minimum distance of 80 feet from the fence line along highway 22.
- i. The owner or operator shall maintain records of the date when Pile Barge, Pile B and Pile E were setback 80 feet from the fence line along highway 22.
 - ii. The owner or operator shall maintain annual records of the distance from the fence line along highway 22 for Pile Barge, Pile B and Pile E.
- R. The owner or operator shall install an enclosed building structure to utilize 95 percent reduction of particulate emissions generated, by June 30, 2019, at:
- i. Kiln 4 Screener (LP-29)
 - ii. Kiln 1, 2, 3 Screener (LP-35)
 - iii. The owner or operator shall maintain records of the completion date for the building enclosure on Kiln 4 Screener (LP-29) and Kiln 4 Screener (LP-29).
- S. The owner or operator shall develop an operating and maintenance plan for the building structure, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the building structure.
- T. The owner or operator shall maintain equipment to ensure 24-hour surveillance of all gaps in the property berm along the river boundaries. "No Trespassing" signs shall be posted at both ends of the gap in the property berm coverage to further restrict public access.
- U. The owner or operator shall maintain a fence along all property lines except as specified in condition T to restrict public access to the facility's property.
- V. The owner or operator shall install and maintain signage to restrict public access from the landfill to Linwood property.

Authority for Requirement: DNR Construction Permit 18-A-117-S2

Monitoring Requirements

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

Compliance Demonstration(s)

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM ₁₀	Active Surface Silt & Moisture Sampling	Quarterly	NA	AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading, Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples

Authority for Requirement: DNR Construction Permit 18-A-117-S2

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 24.108(3)

Emission Point ID Number: EM Engine

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
EM Engine	Kilns Emergency Engine (Model Year 2016)	Natural Gas	201 Bhp 0.5114 MMBtu/hr	NA

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

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

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

NESHAP:

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

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

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

NSPS Subpart JJJJ Requirements

Emission Standards:

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

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

⁽¹⁾ Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O₂.

⁽²⁾ See rule for alternative CO certification standards for engines ≥ 100 hp and manufactured prior to 1/1/2011.

⁽³⁾ Formaldehyde emissions are not included.

Compliance Demonstrations:

1. You must demonstrate compliance with the emission standards according to one of following methods (40 CFR 60.4243(b)):

- a) Purchasing a certified engine that complies with the emission standards, or
- b) Purchasing a non-certified engine and demonstrating compliance with the emission standards. You must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct performance tests to demonstrate compliance in accordance with 40 CFR 60.4244. Owners and operators are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 4243(b) for additional information.

Maximum Engine Power	Initial Test	Subsequent Test
25 < HP ≤ 500	Required	Not required

2. Owners and operators of SI engines that are required to be certified and who operate and maintain the engine according to the manufacturer's written instructions must keep records of required maintenance. 40 CFR 60.4243(b)(1), 4243(a) and 4245(a)(2).
3. Owners and operators of natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, a performance test must be conducted to demonstrate compliance with the emission standards. 40 CFR 60.4243(e).
4. If you are an owner or operator of engine ≤ 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing, but you are not required to conduct subsequent performance testing unless the engine is rebuilt or undergoes major repair or maintenance. 40 CFR 60.4243(f).
5. Owners and operators of certified engines must keep a record from the manufacturer that the engines are certified to meet applicable emission standards. 40 CFR 60.4245(a)(3).

6. Owners and operators of non-certified engines or certified engines operating in a non-certified manner must keep documentation that these engines meet the applicable emission standards. 40 CFR 60.4245(a)(4).

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

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

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

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

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

Authority for Requirements: 40 CFR Part 60, Subpart JJJJ

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 24.108(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 (IAC). When 567 IAC as amended May 15, 2024, and cited in this permit becomes State Implementation Plan (SIP) approved, it will supersede 567 IAC as amended February 8, 2023. Prior to May 15, 2024, all Title V rule citations in this Title V permit were found and cited in 567 IAC Chapter 22. During the period from May 15, 2024, to the date that 567 IAC as amended May 15, 2024, is approved into the SIP, both 567 IAC as amended May 15, 2024, and 567 IAC as amended February 8, 2023 form the legal basis for the applicable requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix C.

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 24.108(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 24.105(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 24.108(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 24.108(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 24.108(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 24.108(15)"c"*

G2. Permit Expiration

1. Except as provided in rule 567—24.104(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—24.105(455B). *567 IAC 24.116(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. 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 24.105(2). *567 IAC 24.105*

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 24.107(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 24.108(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 24.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 24.108 (5)

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 24.106 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 24.115(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 24.108 (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 24.108 (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 21.8(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 24.108(4), 567 IAC 24.108(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 24;
- b. Compliance test methods specified in 567 Chapter 21; 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 24.108(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 21.10(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 21.10(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 21.7(1)-567 IAC 21.7(4)*

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 24.108(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 24.
 - 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—24.140(455B) through 567 - 24.144(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 24.110(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 24.110(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 24.110(1). *567 IAC 24.110(3)*

4. The permit shield provided in subrule 24.108(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 24.110(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 24.108(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 - 24.113(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 24.107(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 24.107(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 24.112(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 24, 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 24.111-567 IAC 24.113*

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. Exceedances 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 24.108(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 24.108(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 24.108(17)"a"*, *567 IAC 24.108(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 24.114(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 24.114(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 24.114(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 24.108 (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 24.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 24.108 (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 24.111(1)*. *567 IAC 24.111 (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 24.3(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 (42 days) 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
6200 Park Ave
Suite 200
Des Moines, IA 50321
(515) 343-6589

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 21.10(7)"a", 567 IAC 21.10(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
6200 Park Ave
Suite 200
Des Moines, IA 50321
(515) 313-8325

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

6200 Park Ave
Suite 200
Des Moines, IA 50321
(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 NO. 98-AQ-7

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF: LINWOOD MINING & MINERALS CORP.	ADMINISTRATIVE CONSENT ORDER NO. 98-AQ-7
---	---

TO: Linwood Mining & Minerals Corp.
c/o Robert Niemela
General Manager, Operations
401 East Front Street
Davenport, Iowa 52804

Linwood Mining & Minerals Corp.
c/o John L. Bush, Registered Agent
4321 E. 60th Street
Davenport, Iowa 52804

I. SUMMARY

This Administrative Consent Order is entered into between the Iowa Department of Natural Resources (DNR) and Linwood Mining & Minerals Corporation (Linwood) for the purpose of resolving PM-10 National Ambient Air Quality Violations monitored in Buffalo, Iowa. This Administrative Consent Order supersedes and replaces Administrative Order No. 97-AQ-10, which was issued on May 30, 1997.

Any questions regarding this order should be directed to:

Relating to technical requirements:

Doug Campbell
Iowa Department of Natural Resources
7900 Hickman Road, Suite 1
Des Moines, Iowa 50322
Ph: 515/281-8930

Relating to appeal rights:

Anne Preziosi
Iowa Department of Natural Resources
7900 Hickman Road, Suite 1
Des Moines, Iowa 50322
Ph: 515/281-6243

II. STATEMENT OF FACTS

1. DNR has monitored three exceedences of the 24-hour PM-10 National Ambient Air Quality Standard. On October 15, 1995, a DNR monitoring site located at 11100-110th Avenue in Buffalo, Iowa, recorded a PM-10 concentration of 156.5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), and on August 25, 1995, the same monitor recorded

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: Linwood Mining & Minerals Corp.

a value of 162.7 ug/m³. On April 26, 1994, a monitored value of 229 ug/m³ also was recorded at this site. Per 40 C.F.R. Part 50, Appendix K, the number of expected exceedences was calculated to be 4.8 for the three calendar year period from 1993 through 1995.

2. During the period 1993 through 1995, the annual PM-10 National Ambient Air Quality Standard was exceeded. The monitored annual arithmetic mean for 1993 was 46.7 ug/m³, for 1994 was 60.5 ug/m³, and for 1995 was 67.1 ug/m³, for a three year average of 58.1 ug/m³.

3. Linwood Mining & Minerals Corp. has a facility located in Buffalo, Iowa. Modeling has established that Linwood Mining & Minerals Corp. is a contributor to the PM-10 levels monitored.

4. The DNR and Linwood have cooperated in an effort to reach a resolution in order to avoid having to redesignate the area to be in nonattainment for PM-10. For that purpose, DNR and Linwood have agreed to enter into this Administrative Consent Order.

Linwood has already completed the following projects as part of the agreement with DNR of which this Administrative Consent Order is a part: Linwood has raised the stack for its LP-2 source (Hydrate Silos) and this revised stack height has been included in the revised modeling analysis. Linwood has added and is currently operating a conveyor belt system passing over Highway 22 to allow a reduction in the use of 50-ton trucks crossing Highway 22. The lime kiln exhaust stack (LP-4), was in place at the start of the fourth quarter of 1997. DNR regards the completion of these projects as necessary to the resolution of the PM-10 National Ambient Air Quality Standards violations in Buffalo, Iowa.

Additionally, Linwood has relocated the scale house to a location north of Highway 22 and has added a truck tire wash at the location indicated on Exhibit "A" attached to this Consent Order and by this reference made a part hereof. Linwood has also designed traffic patterns entering and exiting the plant to minimize fugitive dust leaving the plant. Linwood has paved the northern plant exit road to control emissions from track out.

III. CONCLUSIONS OF LAW

1. This order is issued pursuant to the provisions of Iowa Code sections 455B.134(9) and 455B.138(1), which authorize the Director to issue any administrative orders necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division II, and the rules promulgated and permits issued pursuant thereto, and to prevent, abate, and control air pollution.

**IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: Linwood Mining & Minerals Corp.**

2. The emission units and fugitive emissions located at Linwood Mining & Minerals Corp. in Buffalo, Iowa, are "air contaminant sources" as defined by Iowa Code section 455B.131(2) and "stationary sources" as defined by 567 Iowa Administrative Code (I.A.C.) 20.2.

3. According to 567 I.A.C. 28.1, the ambient air quality standards for the State of Iowa shall be the National Primary and Secondary Ambient Air Quality Standards (NAAQS) located at 40 C.F.R. Part 50, as amended through July 1, 1987.

4. The primary and secondary 24-hour ambient air quality standards for PM-10 are 150 ug/m³, 24-hour average concentration. The standards are attained when the expected number of days per calendar year with a 24-hour average concentration above 150 ug/m³, as determined in accordance with 40 C.F.R. Part 50, Appendix K, is equal to or less than one. The concentrations monitored in this case and the resulting estimated number of exceedences constitute a violation of this standard.

5. The level of the primary and secondary annual standards for PM-10 is 50 ug/m³, annual arithmetic mean averaged over a three calendar year period. The standards are attained when the expected annual arithmetic mean concentration, as determined in accordance with 40 C.F.R. Part 50, Appendix K, is less than or equal to 50 ug/m³. The average of the annual arithmetic means for the period 1993 through 1995 exceeds this standard.

6. An exceedence of the NAAQS for PM-10 constitutes "air pollution" as defined by Iowa Code section 455B.131(3).

7. In accordance with the provisions of Iowa Code section 455B.134(9), the Director shall issue orders consistent with the rules to cause the abatement or control of air pollution.

8. According to the provisions of 567 I.A.C. 22.1(1) and 567 I.A.C. 22.1(3), the owner or operator of a stationary source shall obtain a permit to install or alter equipment or control equipment. Any modifications occurring as a result of this consent order shall require a construction permit or shall meet the requirements of a construction permit exemption contained in the provisions of 567 I.A.C. 22.1(2).

9. According to the provisions of 567 I.A.C. 23.2(2)"c," 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, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: Linwood Mining & Minerals Corp.

precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. "Reasonable precautions" are defined in this rule.

IV. ORDER

THEREFORE, DNR orders and LINWOOD AGREES to the following:

1. In accordance with the provisions of 567 I.A.C. 23.3(2)"c"(1), Linwood shall not 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, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. Also in accordance with that rule, Linwood shall take reasonable precautions as defined in the rule to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

2. By no later than April 1, 1998, Linwood shall fence the property lines indicated on Exhibit "A" attached to this Consent Order and by this reference made a part hereof, in order to restrict public access to its facility. Linwood shall install a five-foot tall chain link fence, of the type routinely used in industrial areas, on the south and north of Highway 22. The fence shall be parallel to Highway 22 and shall be located on Linwood property. The remainder of the fencing to be installed shall consist of a combination of barbed wire and woven wire with three or four strands of barbed wire. Existing fencing shall be inspected and repaired. Instead of installing fencing along the portions of the plant property that border the river, Linwood may install equipment adequate to ensure 24-hour surveillance of all gaps in the fence line along the river boundaries. "No trespassing" signs shall be posted at both ends of the gap in the fence coverage to further restrict public access.

Note: The Highway 22 corridor has been fenced with a five-foot high-galvanized chain link fence. The western quarry boundary has been fenced with a woven wire fence. The northern boundary will be fenced pending installation of a buried landfill gas recovery line in this same area. The projected completion date for fencing in the gas line area is April 1, 1998.

3. Linwood shall adopt the formal Fugitive Dust Maintenance Program which is attached as Exhibit "B" and by this reference made a part hereof. This program shall become effective immediately upon the signing of this Consent Order.

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: Linwood Mining & Minerals Corp.

Note: The Fugitive Dust Maintenance Program has been implemented and monthly inspections are being performed on the fugitive dust sources. Written reports are generated by Linwood to document the results of these inspections.

4. Linwood shall control the fugitive emissions from the plant haul roads with an effective control efficiency of 95% by applying lignin suppressant. There are 8700 feet of unpaved plant roads. The spray application width is 20 feet. At the initial application, a lignin suppressant shall be applied to the entire road surface to bring the ground inventory to 0.25 gallons (concentration) per square yard. A total of 4833 gallons of lignin suppressant shall be applied initially. After the initial application, a solution of water and lignin shall be applied in one or more applications resulting in 0.05 gallons lignin concentrate per square yard being applied every two weeks. A total of 966 gallons of lignin suppressant shall be applied every two weeks, except when the temperature at the point of wetting would be below 0 C. (32 F.) (as determined using a thermometer located at the facility) or conditions due to weather in combination with the application of lignin suppressant would create dangerous conditions. Linwood shall maintain records of these applications, which shall include the dates and times of each application, the amount of water and lignin applied, and percentages of each contained in the solution used, and the specific area to which the solution was applied. If the water and lignin are not applied because the site ambient air temperature is less than 0 C (32 F) during the entire day, then the records should indicate this. Records shall be retained for a period of two years following the date of the above entries and shall be made available to the DNR upon request.

Note: Linwood has implemented a fugitive dust control program for its haul roads and the recordkeeping requirements, as described above.

5. Linwood shall locate the storage pile bases as designated on Exhibit "C" attached to this Consent Order. Linwood shall limit storage pile size to the sizes indicated on Exhibit "C." Exhibit "C" shall by this reference become a part of this Consent Order.

Note: Linwood has located the storage pile bases as designated in Exhibit "C". Additionally, the storage pile sizes have been limited to the sizes listed in Exhibit "C".

6. By no later than April 1, 1998, Linwood shall submit to DNR any and all additional information required to complete air quality construction permit applications to amend the permits for the sources listed in Exhibit "D" attached to this Consent Order to change the allowable emissions limits to the limits listed in Exhibit "D." The applications shall be consistent with the information contained in Exhibit "D." Exhibit "D" shall by this reference become a part of this Consent Order. The modification of these emission points shall be completed by no later than August 1, 1998, or within 60 days of the issuance of the necessary permits, whichever last occurs.

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: Linwood Mining & Minerals Corp.

7. By no later than September 30, 1998, or within 60 days of the issuance of the permit for CC-1 (Old Mill) required in Item 8 above, whichever last occurs, the stack for CC-1 will be raised to a height of 21.95 meters above ground level. Additionally, the CC-1 discharge configuration will be changed from horizontal to unobstructed vertical, with a stack diameter of 0.74 meters.

8. In accordance with the provisions of Air Quality Permit No. 73-A-219-S1, issued on September 19, 1996, for Kiln #4, Linwood shall install on the Kiln #4 stack a COM monitor in accordance with the provisions of 40 CFR 60.343.

Note: The opacity monitor has been installed and is operational. Compliance certification tests of the opacity monitor will be performed in the near future.

9. Linwood shall continue to comply with all paragraphs of Iowa DOT Agreement No. 94-16-068. A copy of this agreement is provided in Exhibit "E" of this Consent Order. Exhibit "E" shall by this reference become a part of this Consent Order.

10. Linwood shall submit to the DNR written quarterly reports detailing progress toward the completion of the requirements of this Consent Order, including compliance with the requirements of all air quality construction permits issued as a result of this Consent Order. The quarterly reports shall be due no later than 30 days following the close of each quarter. The first report shall be due on April 30, 1998.

V. APPEAL RIGHTS

Pursuant to the provisions of Iowa Code section 455B.138 and 561 I.A.C. 7.5(1), as adopted by reference at 567 I.A.C. chapter 7, a written Notice of Appeal to the Environmental Protection Commission may be filed within 30 days of receipt of this order. The Notice of Appeal should be filed with the Director, and must identify the specific portion or portions of this order being appealed and include a short and plain statement of the reasons for the appeal. A contested case hearing will be commenced pursuant to the provisions of Iowa Code chapter 17A and 561 chapter 7.

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: Linwood Mining & Minerals Corp.

V. NO ADMISSION

While Linwood agrees to comply with the orders contained herein, it makes no admission as to the Findings of Facts and Conclusions of Law.

VI. WAIVER OF APPEAL RIGHTS

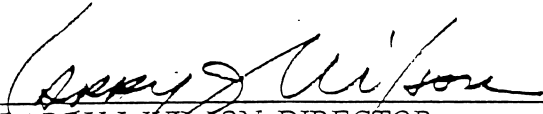
This order is entered into knowingly and with the consent of Linwood. For that reason, Linwood waives its right to appeal this order or any part thereof.

VII. NONCOMPLIANCE

Failure to comply with this order may result in the imposition of administrative penalties or referral to the Attorney General's office to obtain injunctive relief and civil penalties pursuant to the provisions of Iowa Code section 455B.146.

VIII. TERMINATION

With the exception of the recordkeeping and reporting requirements discussed above, this Consent Order shall terminate upon a showing by Linwood, acceptable to DNR, that it has complied with the obligations contained herein.



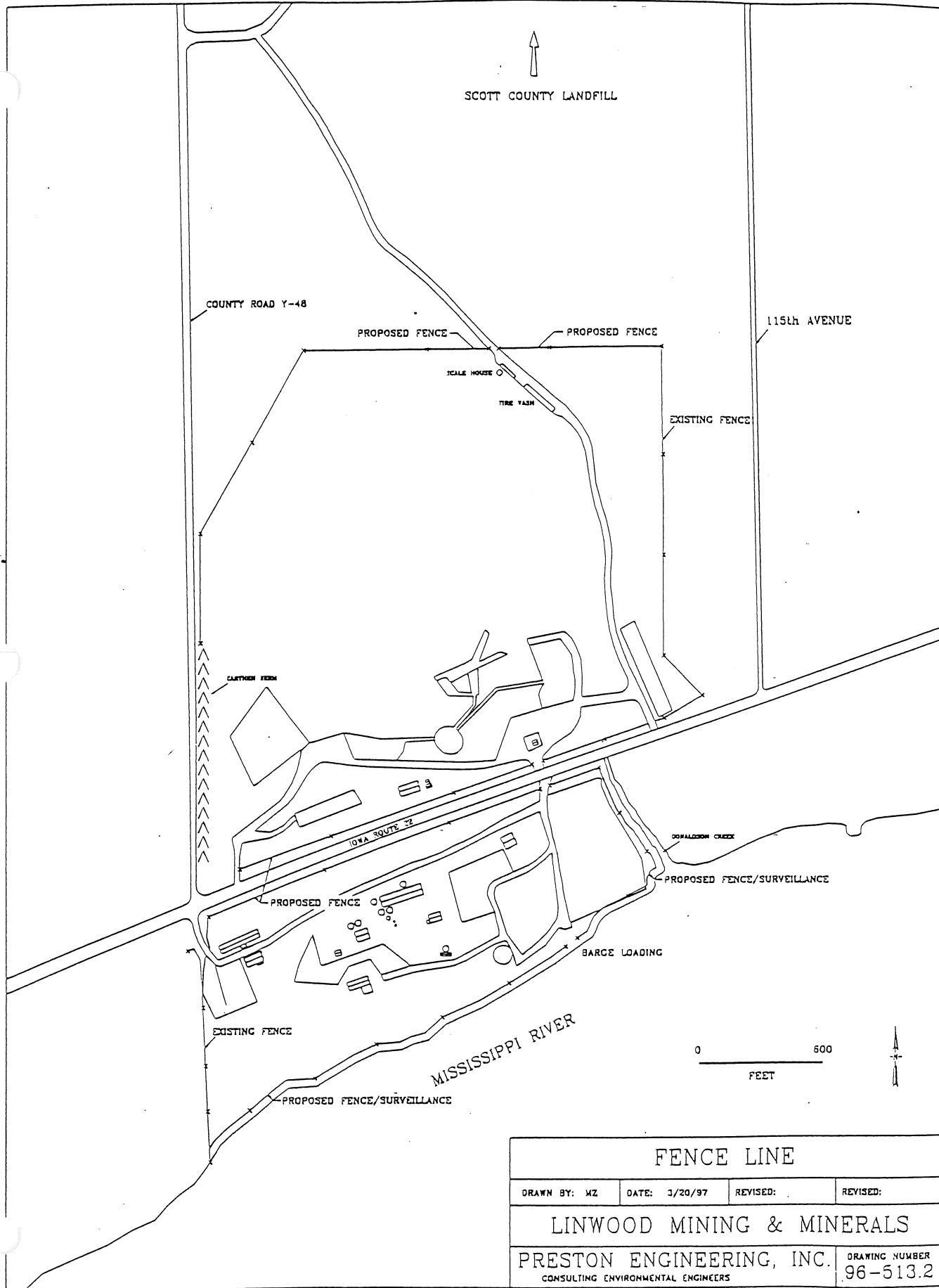
LARRY J. WILSON, DIRECTOR
IOWA DEPARTMENT OF NATURAL RESOURCES

Dated this 13 day of
February, 1998.



for LINWOOD MINING & MINERALS CORP.

Dated this 28 day of
JANUARY, 1998.



FENCE LINE			
DRAWN BY: MZ	DATE: 3/20/97	REVISED:	REVISED:
LINWOOD MINING & MINERALS			
PRESTON ENGINEERING, INC.		DRAWING NUMBER	
CONSULTING ENVIRONMENTAL ENGINEERS		96-513.2	

Exhibit "A"

Exhibit "B"

FUGITIVE DUST MAINTENANCE PROGRAM

1. At all times, Linwood shall take reasonable precautions to prevent visible emissions of fugitive dust from going beyond the Linwood property line in accordance with the provisions of 567 I.A.C. 23.3(2)"c."
2. Operating and maintenance personnel must take immediate action to prevent continued discharge of fugitive dust.
3. The General Manager of Operations, or his designee, shall conduct monthly on site inspections of all emission points, emission units, control equipment, and manufacturing equipment. These on site inspections shall be accompanied by the appropriate company personnel. Monthly reports shall be generated following each site visit.
4. Inspection reports shall include all potential equipment maintenance requirements and date of repair. Maintenance items not taken care of prior to the next inspection shall be carried over on the new inspection report.
5. Linwood shall maintain records at the plant site of any other fugitive dust abatement actions taken.
6. These records shall be made available upon request.

Exhibit "C"
Linwood Mining and Mineral Storage Pile Data

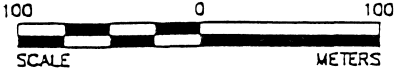
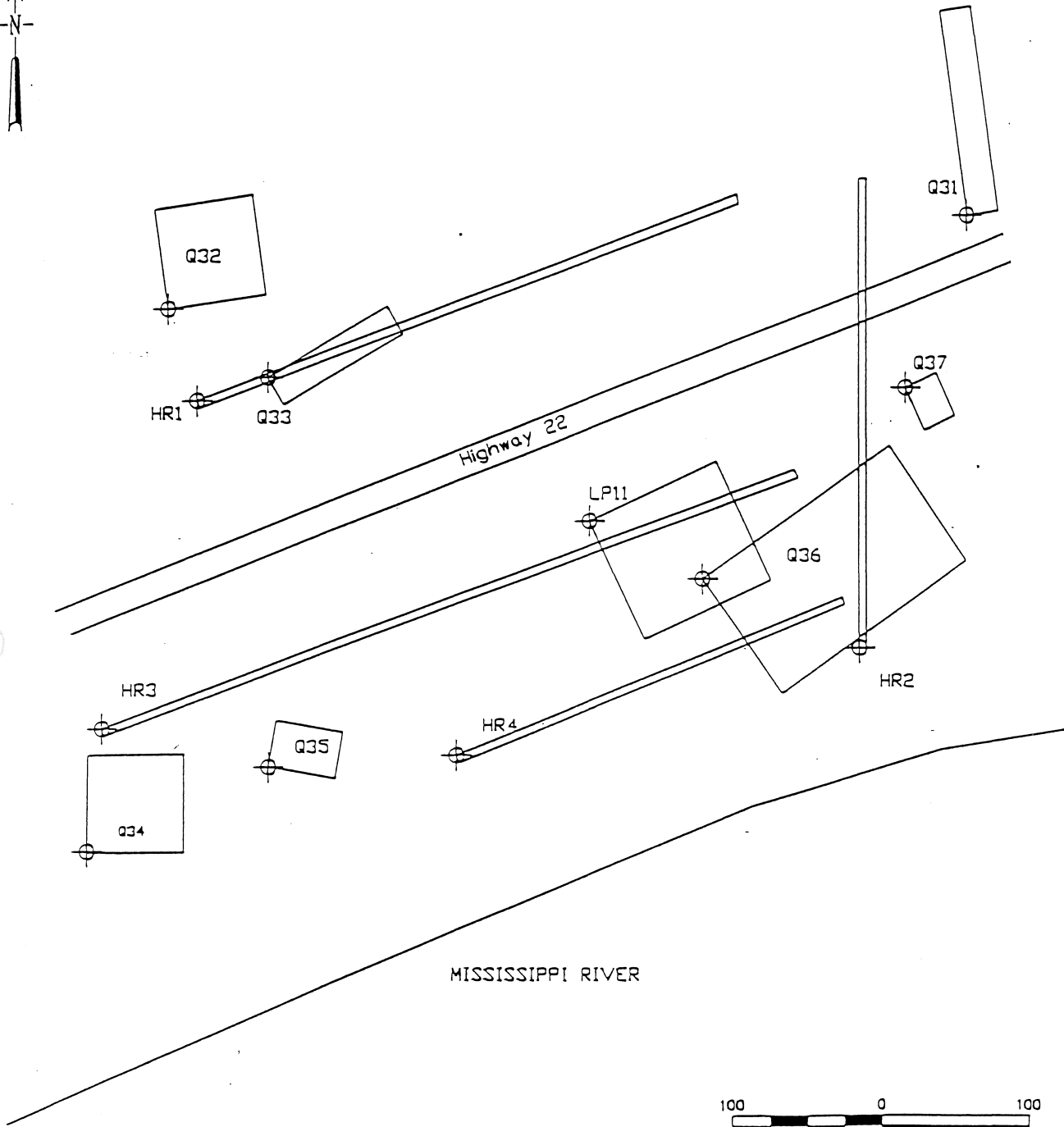
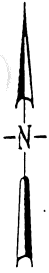
Pile ID*	Pile Base		Angle of Rotation ***	Peak Dimension Meters	Height Feet	rHs** Meters
	UTM (x) Kilometers	UTM (y) Kilometers				
Q31	693.682	4592.721	-8.0	21.36 x 134.1	20	2.84
Q32	693.151	4592.662	-8.0	65 x 65	10	1.4
Q33	693.217	4592.617	60.0	20.7 x 91.44	10	1.4
Q34	693.100	4592.304	0.0	64 x 64	20	2.8
Q35	693.217	4592.363	10.0	45.7 x 30.5	20	2.8
Q36	693.504	4592.485	55.0	91.44 x 152.4	40	5.7
Q37	693.640	4592.610	65.0	30.5 x 22.9	30	4.25
LP11	693.430	4592.523	65.0	85.34 x 91.44	30	4.25

*Q31 - Q37 are limestone storage piles, LP11 is the coal storage pile

**rHs is the initial vertical dimension for a surface based area source where height is divided by 2.15 - Table 3-1, User's Guide for the ISC3 Dispersion Models, Volume 1 September, 1995.

***Angle of rotation refers to how the storage pile location is defined. The pile base location starts as the initial southwest corner and the pile is pivoted positively or negatively by the degrees shown around the pile base corner which is marked by the circle figure on the attached drawing.

January 1998



LEGEND

Q31-Q37 LIMESTONE STORAGE PILES
 LP11 COAL PILE
 HR1-HR4 HAUL ROADS

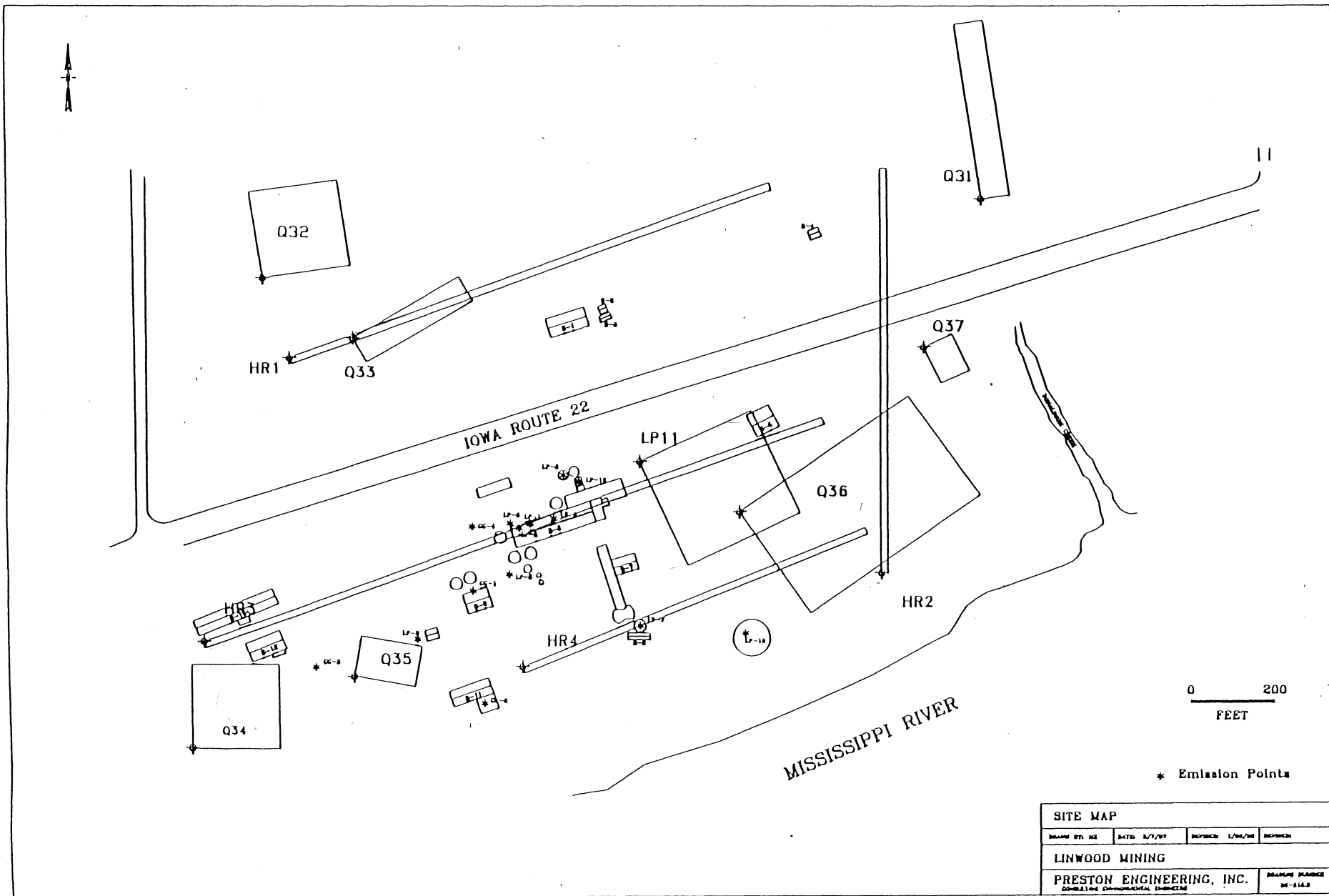
LINWOOD MINING AND MINERALS, BUFFALO, IOWA

DRAWN BY: SMS	DATE: 2/26/96	REVISED: 1/8/98	REVISED:
---------------	---------------	-----------------	----------

AREA SOURCES

PRESTON ENGINEERING INC.
 CONSULTING ENVIRONMENTAL ENGINEERS

DRAWING NUMBER
 96-513.25



IOWA DEPARTMENT OF NATURAL RESOURCES
 ADMINISTRATIVE CONSENT ORDER
 ISSUED TO: Linwood Mining & Minerals Corp.

Exhibit "D"

SPECIFIC LIMITS REQUESTED BY LINWOOD AFFECTING THE
 MODELING ANALYSIS

Table 5-1. Linwood PM₁₀ limit request.

Source Permit Number	Source Description	Current Allowable Emission Rate (gr/scf PM)	Requested PM ₁₀ Limit (Gr/scf)	Number
CC-1	Old Mill	0.1	0.01	71-A-84
CC-2	New Mill	0.01	0.005	86-A-049
CC-3	Calcium Loadout	0.1	0.01	88-A-218
CC-4	Scale Loadout	0.05	0.01	91-A-327
LP-1	Mezzanine Baghouse	0.1	0.02	71-A-82
LP-2	Hydrate Silo	0.1	0.01	71-A-83
LP-3	Bagging Tank	0.1	0.02	71-A-85
LP-5	Hydrator	0.1	0.05	78-A-321
LP-6	Hydrate Loadout	0.1	0.01	88-A-219
LP-7	Kiln Dust Tank	0.1	0.005	88-A-220
LP-8	North West System	0.1	0.005	88-A-221
LP-12	Fluorspar Bin Vent	0.1	0.01	97-A-1084

Exhibit "E"

Iowa DOT Agreement No. 94-16-068

AGREEMENT

County ScottProject No. Iowa 22Iowa DOT
Agreement No. 94-16-068

This AGREEMENT, made and entered into by and between the State of Iowa, Iowa Department of Transportation (herein DOT), and Linwood Mining & Minerals Corporation, an Iowa corporation, (hereafter COMPANY) as follows:

WITNESSETH; that

WHEREAS, the COMPANY and the DOT previously entered into Agreements for vehicles to cross Iowa Highway No. 22 in the City of Buffalo in Scott County, Iowa. The Agreements were signed by the COMPANY and the DOT on August 15 and September 3, 1987, and September 12 and 24, 1990, respectively, and;

WHEREAS, Chapter 321E, Code of Iowa, authorizes the Iowa Department of Transportation to issue special permits; and

WHEREAS, the DOT is willing to extend the terms of the Agreements to the COMPANY for the crossing of Iowa Highway No. 22 for the purpose of transporting limestone materials from the COMPANY's north side quarry to the south side of Iowa Highway No. 22, subject to the stipulation hereinafter set forth.

NOW THEREFORE, in consideration of these premises and the mutually dependent covenants herein contained, it is agreed as follows:

1. The COMPANY agrees that only one (1) point of ingress and one (1) point of egress, opposite one another at Station 290+75 shall be utilized in crossing Iowa Highway No 22 with the vehicles covered by special permit in accord with the terms of this Agreement.
2. The DOT shall furnish and install advance warning signs on Iowa Highway No. 22 in advance of the crossing in compliance with the Iowa Manual on Uniform Traffic Control Devices for Streets and Highways.
3. The COMPANY agrees to remove immediately any and all foreign material which may be deposited on the Iowa 22 roadbed as a result of the COMPANY's operations under this Agreement.

4. The COMPANY shall indemnify and save harmless the DOT and the State of Iowa from any and all causes of action, suits of law or in equity, or losses, damages, claims, or demands, and from all liability of whatsoever nature for and on account of or due to any error, omission or negligent act of the COMPANY, its members employees, agents, subcontractors, or assigns, arising out of or in connection with this Agreement of the performance of any part thereof or for any accident which may occur as a result of the COMPANY vehicles using the crossing.
5. If future rehabilitation at the crossing at Station 290+75 on Iowa Highway No. 22 becomes necessary, it is understood and agreed that the DOT shall have the responsibility of deciding the proper highway rehabilitation, including all phases thereof.
6. The DOT shall perform any required future rehabilitation work and will bill the COMPANY for the actual cost of that portion of the rehabilitation work attributed to the COMPANY's use of the crossing at Station 290+75 by vehicles covered by special permits.
7. The COMPANY agrees to reimburse the DOT for the actual cost of that portion of the rehabilitation at the crossing at Station 290+75 attributed to the COMPANY's use of the crossing by vehicles covered under specific permits. Failure by the COMPANY to reimburse the DOT shall cause cancellation of this Agreement by written notification to the COMPANY by the DOT. After the COMPANY's use of Iowa 22 under this Agreement has been terminated, the DOT will assess the roadway damage and bill the COMPANY for said costs based on the actual quantities in place and the accepted contract bid.
8. The DOT shall issue an annual permit(s) to the COMPANY upon application therefore for each vehicle used in transporting the limestone material over the crossing. The charge for the permit(s), payable in advance to the DOT, shall be at the then current rate per vehicle per year.
9. The terms of this Agreement shall be extended for a period of three (3) additional (consecutive) years. Prior to the expiration date, the COMPANY may, in writing, request that the Agreement be extended again.
10. The COMPANY agrees to comply with any and all provisions set forth in Chapter 321E, Code of Iowa, subject to exceptions set forth in the permits referred to in Item 8. Such exceptions will permit continued use of the type of equipment and procedures being used at the present time as established with the Iowa Department of Transportation during the right of way acquisition in 1973. Failure by the COMPANY to comply with said Code provisions or terms of this Agreement shall constitute sufficient cause for the DOT to void this Agreement immediately.

11. This Agreement may be executed in two counterparts, each of which so executed shall be deemed to be an original and both shall constitute but one and the same instrument.

IN WITNESS WHEREOF, each of the parties hereto has executed Agreement No. 94-16-068 as of the date shown opposite its signature below.

LINWOOD MINING & MINERALS CORPORATION

BY *Gregory B. ...*
President

On this 1st day of OCT., 1993, personally appeared duly sworn did say that he is PRESIDENT. of the Linwood Mining & Minerals Corporation and that said instrument was signed and executed by him in behalf of the said Corporation by authority of its Board of Directors as its voluntary act and deed.

Deanne D. Spahr
Notary Public in and for said State

Executed by the DOT this 31 day of Oct, 1993.

IOWA DEPARTMENT OF TRANSPORTATION

BY *George F. Sisson*
George F. Sisson
Deputy Director-Development
Highway Division

ATTEST:

BY *Ed Faulner*

East Central Iowa Transportation Center
430 Sixteenth Avenue SW
P.O. Box 3150, Cedar Rapids, IA 52406-3150

319-364-0235
FAX: 319-364-9614

March 12, 1997

Re: Iowa 22
Scott County
Addendum 97-A-054

fill w/ agreements

[Signature]
See

Gregory J. Bush
President
Linwood Mining and Minerals Corporation
4321 East 60th Street
Davenport, IA 52807-9744

SUBJECT: Hauling Operations on Iowa 22 - Linwood Mining & Minerals Corporation

Dear Mr. Bush:

Attached is your copy of the fully executed addendum to Agreement 94-16-068 between Linwood Mining & Minerals Corporation and the Iowa Department of Transportation for the above referenced project.

Thank you for your cooperation in the processing of this addendum.

Very truly yours,

Richard E. Kautz, P.E.
Local Systems Engineer

REK:keh
Attachment
cc: Doug Rick, Davenport AME with copy of addendum

ADDENDUM TO
AGREEMENT 94-16-068

County Scott

Linwood Mining & Minerals Corp.

Project No. Iowa 22

Iowa DOT

Addendum No. 97-A-054

IT IS AGREED between the State of Iowa, Iowa Department of Transportation (herein IDOT), Project Development Division and the Linwood Mining & Minerals Corporation in Scott County, Iowa, (herein COMPANY) as follows:

1. The COMPANY is currently conducting hauling operations across Iowa 22 within the City of Buffalo for the purpose of transporting limestone materials from the COMPANY'S north side quarry to the south side of Iowa 22.
2. The COMPANY and DOT previously entered into Agreement 94-16-068 for the above referenced hauling operations. The Agreement was signed by the COMPANY and DOT on October 1 and 31, 1993 respectively.
3. The COMPANY, per an October 1, 1996 letter, has requested an extension of the agreement for hauling operations on Iowa 22 in the City of Buffalo in Scott County Iowa (see Exhibit A attached).
4. The terms and conditions contained in previously executed Agreement 94-16-068 (see section 2 above) shall be extended for a period of five (5) years. Prior to the expiration date, the COMPANY may, in writing, request that the Agreement be extended again. For the purpose of this Addendum, the "expiration date" shall be defined as; five (5) years subsequent to the date of the COMPANY'S signature on this Addendum.
5. All provisions contained in previously executed Agreement 94-16-068 which are not revised or in any way affected by this addendum shall remain in full force and effect.
6. If any section, provision, or part of this Addendum shall be found to be invalid or unconstitutional, such judgment shall not affect the validity of the

Addendum as a whole or any section, provision, or part thereof not found to be invalid or unconstitutional.

7. This Addendum may be executed in two counterparts, each of which so executed shall be deemed to be an original.
8. Any subsequent change or modification to the terms of this Addendum shall be in the form of a duly executed Amendment to this Addendum.

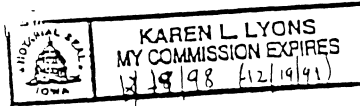
IN WITNESS WHEREOF, each of the parties hereto has executed Preconstruction Agreement No. 97-A-054 as of the date shown opposite its signature below.

LINWOOD MINING & MINERALS CORPORATION:

BY: [Signature]
President

On this 24th Day of January, 1997, personally appeared duly sworn did say that he is President of the Linwood Mining & Minerals Corporation and that said instrument was signed and executed by him on behalf of said Corporation by authority of its Board of Directors as its voluntary act and deed.

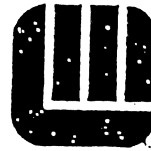
[Signature]
Notary Public in and for the State of Iowa



IOWA DEPARTMENT OF TRANSPORTATION:

BY [Signature] _____, 1997
Date
Director, Maintenance Division

Attest: [Signature]



LINWOOD MINING & MINERALS CORP.

4321 EAST 60th STREET • DAVENPORT, IOWA 52807-9744

October 1, 1996

Douglas L. Rick, P.E.
Area Maintenance Engineer
Davenport Maintenance Office
Iowa Department of Transportation
P. O. Box 2646
Davenport, Iowa 52809

Dear Mr. Rick:

I am in receipt of the current Agreement between Linwood Mining & Minerals Corporation and the Iowa Department of Transportation regarding our firms crossing of A22 with overweight vehicles. After reviewing the contents of this Agreement, I am requesting it be renewed. Please make arrangements for appropriate processing and approvals.

If you need to discuss this matter further, please do not hesitate to contact me at 359-8251.

Sincerely,

LINWOOD MINING AND MINERALS CORPORATION

A handwritten signature in black ink that reads "Gregory J. Bush". The signature is written in a cursive, flowing style.

Gregory J. Bush
President

GJB:kll

cc: Bob Niemela, Plant Manager, Linwood Mining and Minerals Corp.

Appendix B: NSPS and NESHAP Web Links

- NSPS Subpart A – General Provisions
<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-A>
- NSPS Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants
<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-OOO>
- NSPS Subpart HH – Standards of Performance for Lime Manufacturing Plants
<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-HH>
- NSPS Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-JJJJ>
- NESHAP Subpart A – General Provisions
<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-A>
- NESHAP Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-ZZZZ>

Appendix C: Executive Order 10 (EO10) Rules Crosswalk

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
20	20 (Reserved)	Scope of Title - Definitions	N/A	Definitions moved to Ch. 21, 22 and 23. Rescinded Ch. 20. (Reserved)
21	21	Compliance	Compliance, Excess Emissions, and Measurement of Emissions	Kept and combined with rules from Chapters 24, 25, 26, and 29.
22	22	Controlling Pollution-Permits	Controlling Air Pollution - Construction Permitting	Kept construction permit rules and combined with Ch. 20 (definitions) and Ch. 28 (NAAQS). Moved operating permit rules to Chapter 24.
22.100 - 22.300(12)	(New) 24	N/A	Operating Permits	Moved operating permit rules from Ch. 22 to Ch. 24.
23	23	Emission Standards	Air Emission Standards	Kept
24	(New) 21	Excess Emissions	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21. Moved TV rules here (to Ch. 24).
25	(New) 21	Emissions Measurement	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21. Rescinded Ch. 25. (Reserved)
26	(New) 21	Emergency Air Pollution Episodes	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21. Rescinded Ch. 26. (Reserved)
27	27	Local Program Acceptance	Local Program Acceptance	Kept
28	22	NAAQS	N/A	Moved rules and combined with Ch. 22. Rescinded Ch. 28. (Reserved)
29	(New) 21	Opacity Qualifications	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21. Rescinded Ch. 29. (Reserved)
30	30	Fees	Fee	Kept
31	31	Nonattainment Areas	Nonattainment New Source Review	Kept
32	N/A	AFO Field Study	N/A	Rescinded Ch. 32. (Reserved)
33	33	Special regulations and construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD) of air quality	Construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD)	Kept
34	N/A	Emissions Trading-CAIR-CAMR	N/A	Rescinded Ch. 34. (Reserved)
35	N/A	Grant Assistance Programs	N/A	Rescinded Ch. 35. (Reserved)

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
20	20 (Reserved)	Scope of Title - Definitions	N/A	Definitions moved to Ch. 21, 22 and 23. Rescinded Ch. 20. (Reserved)
20.1	N/A	Scope of title	N/A	
20.2	Ch. 21, 22, 23	Definitions	Definitions	See beginning of Ch. 21, 22, and 23
20.3	N/A	Air quality forms generally	N/A	

21	21	Compliance	Compliance, Excess Emissions, and Measurement of Emissions	Kept and combined with rules from Chapters 24, 25, 26, and 29.
21.1	21.1	Compliance Schedule	Definitions and compliance requirements	Added definitions from Ch. 21, some language updated
21.2	21.2	Variances	Variances	Some language updated
21.3	21.3	Emission reduction program	Reserved	Reserved
21.4	21.4	Circumvention of rules	Circumvention of rules	Minor language updated
21.5	21.5	Evidence used in establishing that a violation has or is occurring	Evidence used in establishing that a violation has occurred or is occurring	21.5(2) Reserved, some language updated
21.6	21.6	Temporary electricity generation for disaster situations	Temporary electricity generation for disaster situations	Minor language updated
24.1	21.7	Excess emission reporting	Excess emission reporting	Moved from Ch. 24, some language updated
24.2	21.8	Maintenance and repair requirements	Maintenance and repair requirements	Moved from Ch. 24, some language updated
N/A	21.9	N/A	Compliance with other requirements	New language
25.1	21.10	Testing and sampling of new and existing equipment	Testing and sampling of new and existing equipment	Moved from Ch. 25, some language updated
25.2	21.11	Continuous emission monitoring under the acid rain program	Continuous emission monitoring under the acid rain program	Moved from Ch. 25, some language updated
25.3	N/A	Mercury emissions testing and monitoring	N/A	Rescinded. Except 25.3(5)
25.3(5)	21.12	Affected sources subject to Section 112(g)	Affected sources subject to Section 112(g)	Moved from Ch. 25, some language updated
29.1	21.13	Methodology and qualified observer	Methodology and qualified observer	Moved from Ch. 29, some language updated
26.1	21.14	Prevention of air pollution emergency episodes - General	Prevention of air pollution emergency episodes	Moved from Ch. 26, some language updated
26.2	21.15	Episode criteria	Episode criteria	Moved from Ch. 26, some language updated
26.3	21.16	Preplanned abatement strategies	Preplanned abatement strategies	Moved from Ch. 26, some language updated
26.4	21.17	Actions taken during episodes	Actions taken during episodes	Moved from Ch. 26, some language updated
Ch 26 Table III	Table I	Abatement strategies emission reduction actions alert level	Abatement strategies emission reduction actions alert level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table IV	Table II	Abatement strategies emission reduction actions warning level	Abatement strategies emission reduction actions warning level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table V	Table III	Abatement strategies emission reduction actions emergency level	Abatement strategies emission reduction actions emergency level	Moved from Ch. 26, reference federal appendix table

22	22	Controlling Pollution-Permits	Controlling Air Pollution - Construction Permitting	Kept construction permit rules and combined with Ch. 20 (definitions) and Ch. 28 (NAAQS). Moved operating permit rules to Chapter 24.
22.1	22.1	Permits required for new or existing stationary sources	Definitions and permit requirements for new or existing stationary sources	Added definitions from Ch. 20, some language updated
22.2	22.2	Processing permit applications	Processing permit applications	
22.3	22.3	Issuing permits	Issuing permits	
22.4	22.4	Special requirements for major stationary sources located in areas designated attainment or unclassified (PSD)	Major stationary sources located in areas designated attainment or unclassified (PSD)	
22.5	22.5	Special requirements for nonattainment areas	Major stationary sources located in areas designated Nonattainment	
22.6	22.6	Nonattainment area designations	Reserved	

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
22.7	22.7	Alternative emission control program	Alternative emission control program	
22.8	22.8	Permit by rule	Permit by rule	
22.9	22.9	Special requirements for visibility protection	Special requirements for visibility protection	A lot of language updated or removed
22.10	22.10	Permitting requirements for country grain elevators, country grain terminal elevators, grain terminal elevators and feed mill equipment	Permitting requirements for country grain elevators, country grain terminal elevators, grain terminal elevators and feed mill equipment	
28.1	22.11	Ambient air quality standards - Statewide standards	Ambient air quality standards	Moved from Ch. 28, minor language updated
22.12 to 22.99	N/A	Reserved	N/A	Removed

22.100 - 22.300(12)	(New) 24	N/A	Operating Permits	Moved operating permit rules from Ch. 22 to Ch. 24.
22.100	24.100	Definitions for Title V operating permits	Definitions for Title V operating permits	Moved from Ch. 22, some language updated, many 40 CFR 70 definitions adopted by reference
22.101	24.101	Applicability of Title V operating permit requirements	Applicability of Title V operating permit requirements	Moved from Ch. 22, some language updated to correct punctuation and remove old dates
22.102	24.102	Source category exemptions	Source category exemptions	Moved from Ch. 22, some language updated to correct punctuation
22.103	24.103	Insignificant activities	Insignificant activities	Moved from Ch. 22, some language updated to correct typos and remove old dates
22.104	24.104	Requirement to have a Title V permit	Requirement to have a Title V permit	Moved from Ch. 22, some language updated no changes to rule text
22.105	24.105	Title V permit applications	Title V permit applications	Moved from Ch. 22, updated language to address electronic submissions and remove past application due dates
22.106	24.106	Annual Title V emissions inventory	Annual Title V emissions inventory	Moved from Ch. 22, no changes to rule text
22.107	24.107	Title V permit processing procedures	Title V permit processing procedures	Moved from Ch. 22, some language updated to update locations of public records and remove old CFR amendment dates
22.108	24.108	Permit content	Permit content	Moved from Ch. 22, some language updated to correct punctuation, remove old dates, and adopt 40 CFR 70 rules by reference
22.109	24.109	General permits	General permits	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.110	24.110	Changes allowed without a Title V permit revision (off-permit revisions)	Changes allowed without a Title V permit revision (off-permit revisions)	Moved from Ch. 22, some language updated to remove redundant language
22.111	24.111	Administrative amendments to Title V permits	Administrative amendments to Title V permits	Moved from Ch. 22, no changes to rule text
22.112	24.112	Minor Title V permit modifications	Minor Title V permit modifications	Moved from Ch. 22, no changes to rule text
22.113	24.113	Significant Title V permit modifications	Significant Title V permit modifications	Moved from Ch. 22, no changes to rule text
22.114	24.114	Title V permit reopenings	Title V permit re-openings	Moved from Ch. 22 to Ch. 24, some language updated to adopt 40 CFR 70 rules by reference
22.115	24.115	Suspension, termination, and revocation of Title V permits	Suspension, termination, and revocation of Title V permits	Moved from Ch. 22, no changes to rule text
22.116	24.116	Title V permit renewals	Title V permit renewals	Moved from Ch. 22, no changes to rule text
22.117-22.119	24.117-24.119	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.120	24.120	Acid rain program—definitions	Acid rain program—definitions	Moved from Ch. 22, some language updated to remove old CFR amendment dates and address electronic submissions
22.121	24.121	Measurements, abbreviations, and acronyms	Reserved	Moved from Ch. 22, no changes to rule text
22.122	24.122	Applicability	Applicability	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.123	24.123	Acid rain exemptions	Acid rain exemptions	Moved from Ch. 22, some language updated to correct punctuation
22.124	24.124	Retired units exemption	Reserved	Moved from Ch. 22, no changes to rule text
22.125	24.125	Standard requirements	Standard requirements	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.126	24.126	Designated representative—submissions	Designated representative—submissions	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.127	24.127	Designated representative—objections	Designated representative—objections	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.128	24.128	Acid rain applications—requirement to apply	Acid rain applications—requirement to apply	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference

22.129	24.129	Information requirements for acid rain permit applications	Information requirements for acid rain permit applications	Moved from Ch. 22, no changes to rule text
Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
22.130	24.130	Acid rain permit application shield and binding effect of permit application	Acid rain permit application shield and binding effect of permit application	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.131	24.131	Acid rain compliance plan and compliance options—general	Acid rain compliance plan and compliance options—general	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.132	24.132	Repowering extensions	Reserved	Moved from Ch. 22, no changes to rule text
22.133	24.133	Acid rain permit contents—general	Acid rain permit contents—general	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.134	24.134	Acid rain permit shield	Acid rain permit shield	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.135	24.135	Acid rain permit issuance procedures—general	Acid rain permit issuance procedures—general	Moved from Ch. 22, no changes to rule text
22.136	24.136	Acid rain permit issuance procedures—completeness	Acid rain permit issuance procedures—completeness	Moved from Ch. 22, no changes to rule text
22.137	24.137	Acid rain permit issuance procedures—statement of basis	Acid rain permit issuance procedures—statement of basis	Moved from Ch. 22, no changes to rule text
22.138	24.138	Issuance of acid rain permits	Issuance of acid rain permits	Moved from Ch. 22, some language updated to remove old dates and deadlines
22.139	24.139	Acid rain permit appeal procedures	Acid rain permit appeal procedures	Moved from Ch. 22, no changes to rule text
22.140	24.140	Permit revisions—general	Permit revisions—general	Moved from Ch. 22, some language updated to remove old dates
22.141	24.141	Permit modifications	Permit modifications	Moved from Ch. 22, no changes to rule text
22.142	24.142	Fast-track modifications	Fast-track modifications	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.143	24.143	Administrative permit amendment	Administrative permit amendment	Moved from Ch. 22, some language updated to remove fax option
22.144	24.144	Automatic permit amendment	Automatic permit amendment	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.145	24.145	Permit reopenings	Permit re-openings	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.146	24.146	Compliance certification—annual report	Compliance certification—annual report	Moved from Ch. 22, no changes to rule text
22.147	24.147	Compliance certification—units with repowering extension plans	Reserved	Moved from Ch. 22, no changes to rule text
22.148	24.148	Sulfur dioxide opt-ins	Sulfur dioxide opt-ins	Moved from Ch. 22, some language updated to update the 40 CFR Part 74 amendment date
22.149 - 22.199	24.149 - 24.299	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.200	24.200 - 24.299	Definitions for voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.201	24.200 - 24.299	Eligibility for voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.203	24.200 - 24.299	Voluntary operating permit applications	Reserved	Moved from Ch. 22, no changes to rule text
22.204	24.200 - 24.299	Voluntary operating permit fees	Reserved	Moved from Ch. 22, no changes to rule text
22.205	24.200 - 24.299	Voluntary operating permit processing procedures	Reserved	Moved from Ch. 22, no changes to rule text
22.206	24.200 - 24.299	Permit content	Reserved	Moved from Ch. 22, no changes to rule text
22.207	24.200 - 24.299	Relation to construction permits	Reserved	Moved from Ch. 22, no changes to rule text
22.208	24.200 - 24.299	Suspension, termination, and revocation of voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.209	24.200 - 24.299	Change of ownership for facilities with voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.210 - 22.299	24.200 - 24.299	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.300	24.300	Operating permit by rule for small sources	Operating permit by rule for small sources	Moved from Ch. 22, no changes to rule text

23	23	Emission Standards	Air Emission Standards	Kept
23.1	23.1	Emission standards	Emission standards	Kept, language updated, tables used
23.2	23.2	Open burning	Open burning	Kept, some language updated
23.3	23.3	Specific contaminants	Specific contaminants	Kept, some language updated
23.4	23.4	Specific processes	Specific processes	Kept, some language updated
23.5	23.5	Anaerobic lagoons	Anaerobic lagoons	Kept, some language updated
23.6	23.6	Alternative emission limits (the “bubble concept”)	Reserved	Removed

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
24	(New) 21	Excess Emissions	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21. Moved operating permit rules here (to Ch. 24).
24.1	21.7	Excess emission reporting	Excess emission reporting	Moved from Ch. 24, some language updated
24.2	21.8	Maintenance and repair requirements	Maintenance and repair requirements	Moved from Ch. 24, some language updated
25	(New) 21	Emissions Measurement	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21. Rescinded Ch. 25. (Reserved)
25.1	21.10	Testing and sampling of new and existing equipment	Testing and sampling of new and existing equipment	Moved from Ch. 25, some language updated
25.2	21.11	Continuous emission monitoring under the acid rain program	Continuous emission monitoring under the acid rain program	Moved from Ch. 25, some language updated
25.3		Mercury emissions testing and monitoring	N/A	Rescinded. Except 25.3(5)
25.3(5)	21.12	Affected sources subject to Section 112(g)	Affected sources subject to Section 112(g)	Moved from Ch. 25, some language updated
26	(New) 21	Emergency Air Pollution Episodes	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21. Rescinded Ch. 26. (Reserved)
26.1	21.14	Prevention of air pollution emergency episodes - General	Prevention of air pollution emergency episodes	Moved from Ch. 26, some language updated
26.2	21.15	Episode criteria	Episode criteria	Moved from Ch. 26, some language updated
26.3	21.16	Preplanned abatement strategies	Preplanned abatement strategies	Moved from Ch. 26, some language updated
26.4	21.17	Actions taken during episodes	Actions taken during episodes	Moved from Ch. 26, some language updated
Ch 26 Table III	Table I	Abatement strategies emission reduction actions alert level	Abatement strategies emission reduction actions alert level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table IV	Table II	Abatement strategies emission reduction actions warning level	Abatement strategies emission reduction actions warning level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table V	Table III	Abatement strategies emission reduction actions emergency level	Abatement strategies emission reduction actions emergency level	Moved from Ch. 26, reference federal appendix table
27	27	Local Program Acceptance	Local Program Acceptance	Kept
27.1	27.1	General	General	Kept, some language updated
27.2	27.2	Certificate of acceptance	Certificate of acceptance	Kept, some language updated
27.3	27.3	Ordinance or regulations	Ordinance or regulations	Kept, some language updated
27.4	27.4	Administrative organization	Administrative organization	Kept, some language updated
27.5	27.5	Program activities	Program activities	Kept, some language updated
28	22	NAAQS	N/A	Moved rules and combined with Ch. 22. Rescinded Ch. 28. (Reserved)
28.1	22.11	Ambient air quality standards - Statewide standards	Ambient air quality standards	Moved from Ch. 28, minor language updated Rescinded Ch. 28. (Reserved)
29	(New) 21	Opacity Qualifications	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21. Rescinded Ch. 29. (Reserved)
29.1	21.13	Methodology and qualified observer	Methodology and qualified observer	Moved from Ch. 29, some language updated

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
30	30	Fees	Fee	Kept
30.1	30.1	Purpose	Purpose	Kept, language updated
30.2	30.2	Fees associated with new source review applications	Fees associated with new source review applications	Kept, some language updated
30.3	30.3	Fees associated with asbestos demolition or renovation notification	Fees associated with asbestos demolition or renovation notification	Kept, some language updated
30.4	30.4	Fees associated with Title V operating permits	Fees associated with Title V operating permits	Kept, some language updated
30.5	30.5	Fee advisory groups	Fee advisory groups	Kept, language updated
30.6	30.6	Process to establish or adjust fees and notification of fee rates	Process to establish or adjust fees and notification of fee rates	Kept, some language updated
30.7	30.7	Fee revenue	Reserved	Language removed

31	31	Nonattainment Areas	Nonattainment New Source Review	Kept
31.1	31.1	Permit requirements relating to nonattainment areas	Permit requirements relating to nonattainment areas	Kept, some language updated
31.2	31.2	Conformity of general federal actions to the Iowa state implementation plan or federal implementation plan - Rescinded	Reserved	Language removed
31.3	31.3	Nonattainment new source review requirements for areas designated nonattainment on or after May 18, 1998	Nonattainment new source review (NNSR) requirements for areas designated nonattainment	Kept, some language updated
31.4	31.4	Preconstruction review permit program	Preconstruction review permit program	Kept
31.5 - 31.8	31.5 - 31.8	Reserved	Reserved	Kept
31.9	31.9	Actuals PALs	Actuals PALs	Kept, some language updated
31.10	31.10	Validity of rules	Validity of rules	Kept
31.11 - 31.19	N/A	Reserved	N/A	Rescinded and removed
31.20	N/A	Special requirements for nonattainment areas designated before May 18, 1998	N/A	Rescinded and removed

32	N/A	AFO Field Study	N/A	Rescinded Ch. 32. (Reserved)
32.1	N/A	Animal feeding operations field study	N/A	Rescinded, reserved, and language removed
32.2	N/A	Definitions	N/A	Rescinded, reserved, and language removed
32.3	N/A	Exceedance of the health effects value (HEV) for hydrogen sulfide	N/A	Rescinded, reserved, and language removed
32.4	N/A	Exceedance of the health effects standard (HES) for hydrogen sulfide	N/A	Rescinded, reserved, and language removed
32.5	N/A	Iowa Air Sampling Manual	N/A	Rescinded, reserved, and language removed

33	33	Special regulations and construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD) of air quality	Construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD)	Kept
33.1	33.1	Purpose	Purpose	Kept, some language updated
33.2	33.2	Reserved	Reserved	Kept
33.3	33.3	Special construction permit requirements for major stationary sources in areas designated attainment or unclassified (PSD)	PSD construction permit requirements for major stationary sources	Kept, some language updated
33.4 - 33.8	33.4 - 33.8	Reserved	Reserved	Kept
33.9	33.9	Plantwide applicability limitations (PALs)	Plantwide applicability limitations (PALs)	Kept, some language updated
33.10	33.10	Exceptions to adoption by reference	Exceptions to adoption by reference	Kept, some language updated

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
34	N/A	Emissions Trading-CAIR-CAMR	N/A	Rescinded Ch. 34. (Reserved)
34.1	N/A	Purpose	N/A	Rescinded, reserved, and language removed
34.2 - 34.199	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.200	N/A	Provisions for air emissions trading and other requirements for the Clean Air Interstate Rule (CAIR) - rescinded	N/A	Rescinded, reserved, and language removed
34.201	N/A	CAIR NOx annual trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed
34.202	N/A	CAIR designated representative for CAIR NOx sources - rescinded	N/A	Rescinded, reserved, and language removed
34.203	N/A	Permits - rescinded	N/A	Rescinded, reserved, and language removed
34.204	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.205	N/A	CAIR NOx allowance allocations - rescinded	N/A	Rescinded, reserved, and language removed
34.206	N/A	CAIR NOx allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed
34.207	N/A	CAIR NOx allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed
34.208	N/A	Monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed
34.209	N/A	CAIR NOx opt-in units - rescinded	N/A	Rescinded, reserved, and language removed
34.210	N/A	CAIR SO2 trading program - rescinded	N/A	Rescinded, reserved, and language removed
34.211 - 34.219	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.220	N/A	CAIR NOx ozone season trading program - rescinded	N/A	Rescinded, reserved, and language removed
34.221	N/A	CAIR NOx ozone season trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed
34.222	N/A	CAIR designated representative for CAIR NOx ozone season sources - rescinded	N/A	Rescinded, reserved, and language removed
34.223	N/A	CAIR NOx ozone season permits - rescinded	N/A	Rescinded, reserved, and language removed
34.224	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.225	N/A	CAIR NOx ozone season allowance allocations - rescinded	N/A	Rescinded, reserved, and language removed
34.226	N/A	CAIR NOx ozone season allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed
34.227	N/A	CAIR NOx ozone season allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed
34.228	N/A	CAIR NOx ozone season monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed
34.229	N/A	CAIR NOx ozone season opt-in units - rescinded	N/A	Rescinded, reserved, and language removed
34.230 - 34.299	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.300	N/A	Provisions for air emissions trading and other requirements for the Clean Air Mercury Rule (CAMR) - rescinded	N/A	Rescinded, reserved, and language removed
34.301	N/A	Mercury (Hg) budget trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed
34.302	N/A	Hg designated representative for Hg budget sources - rescinded	N/A	Rescinded, reserved, and language removed
34.303	N/A	General Hg budget trading program permit requirements - rescinded	N/A	Rescinded, reserved, and language removed
34.304	N/A	Hg allowance allocations - rescinded	N/A	Rescinded, reserved, and language removed
34.305	N/A	Hg allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed

AQB Rule Tracking Crosswalk

34.306	N/A	Hg allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed
Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
34.307	N/A	Monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed
34.308	N/A	Performance specifications - rescinded	N/A	Rescinded, reserved, and language removed

35	N/A	Grant Assistance Programs	N/A	Rescinded Ch. 35. (Reserved)
35.1	N/A	Purpose	N/A	Rescinded, reserved, and language removed
35.2	N/A	Definitions	N/A	Rescinded, reserved, and language removed
35.3	N/A	Role of the department of natural resources	N/A	Rescinded, reserved, and language removed
35.4	N/A	Eligible projects	N/A	Rescinded, reserved, and language removed
35.5	N/A	Forms	N/A	Rescinded, reserved, and language removed
35.6	N/A	Project selection	N/A	Rescinded, reserved, and language removed
35.7	N/A	Funding sources	N/A	Rescinded, reserved, and language removed
35.8	N/A	Type of financial assistance	N/A	Rescinded, reserved, and language removed
35.9	N/A	Term of loans	N/A	Rescinded, reserved, and language removed
35.10	N/A	Reduced award	N/A	Rescinded, reserved, and language removed
35.11	N/A	Fund disbursement limitations	N/A	Rescinded, reserved, and language removed
35.12	N/A	Applicant cost share	N/A	Rescinded, reserved, and language removed
35.13	N/A	Eligible costs	N/A	Rescinded, reserved, and language removed
35.14	N/A	Ineligible costs	N/A	Rescinded, reserved, and language removed
35.15	N/A	Written agreement	N/A	Rescinded, reserved, and language removed
35.16	N/A	Financial assistance denial	N/A	Rescinded, reserved, and language removed