

**Commonwealth of Kentucky  
Energy and Environment Cabinet  
Department for Environmental Protection  
Division for Air Quality  
300 Sower Boulevard, 2<sup>nd</sup> Floor  
Frankfort, Kentucky 40601  
(502) 564-3999**

**Proposed**

**AIR QUALITY PERMIT  
Issued under 401 KAR 52:020**

**Permittee Name:** Carmeuse Lime and Stone, Inc.  
**Mailing Address:** 9222 Springdale Road  
Maysville, KY 41506

**Source Name:** Carmeuse Lime and Stone – Maysville Plant  
**Mailing Address:** Same as Above

**Source Location:** 9222 Springdale Road  
Maysville, KY 41506

**Permit:** V-21-006 R2  
**Agency Interest:** 3003  
**Activity:** APE20240001  
**Review Type:** Title V, Construction/ Operating  
**Source ID:** 21-161-00010

**Regional Office:** Ashland Regional Office  
1550 Wolohan Drive, Suite 1  
Ashland, KY 41102  
(606) 929-5285

**County:** Mason

**Application**  
**Complete Date:** June 29, 2021  
**Issuance Date:** February 22, 2023  
**Revision Date:** April 25, 2025  
**Expiration Date:** February 22, 2028

*Rick Shewekah*

---

**For Michael J. Kennedy, P.E.  
Director  
Division for Air Quality**

# TABLE OF CONTENTS

SECTION	ISSUANCE	PAGE
A. PERMIT AUTHORIZATION	Renewal	1
B. EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS	Revision 2	2
C. INSIGNIFICANT ACTIVITIES	Renewal	55
D. SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS	Revision 2	56
E. SOURCE CONTROL EQUIPMENT REQUIREMENTS	Renewal	58
F. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS	Renewal	59
G. GENERAL PROVISIONS	Revision 2	62
H. ALTERNATE OPERATING SCENARIOS	Revision 2	68

Permit	Permit Type	Activity#	Complete Date	Issuance Date	Summary of Action
V-21-006	Renewal	APE20210002	6/29/2021	2/22/2023	Renewal of Permit V-16-014 R2
V-21-006 R1	Minor Revision	APE20230001	8/28/2023	8/2/2024	Addition of EP 22 20 – EP 22 23 and EP 14 18
V-21-006 R2	Significant Revision	APE20240001	11/8/2024	4/25/2025	Addition of Dry Sorbent Injection (DSI) Systems (EP 30 01 – EP 30 12) as a Control Method for the Rotary Kilns

## **SECTION A – PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Energy and Environment Cabinet (Cabinet) hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit was issued under the provisions of Kentucky Revised Statutes (KRS) Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

### Emission Group 9: KL04 – Rotary Kilns

EP	Name	Capacity (tons/hr)	Construction Date	Control Device
07 01	Rotary Lime Kiln #4 Fuller Kiln – 16' × 210' Primary Fuel: Pulverized Coal, Startup Fuel: Diesel Oil	46	7/8/1997	Pulse-Jet Baghouse Amerex Industries, Model: 7 Module Rex Pulse RP-14 304 D6 (16 × 19); Dry Sorbent Injection System (DSI-04)

### APPLICABLE REGULATIONS:

**401 KAR 51:017, Prevention of Significant Deterioration of Air Quality**

**401 KAR 59:010, New Process Operations**

**401 KAR 60:005, Section 2(2)(qq) 40 C.F.R. 60.340 through 60.344 (Subpart HH), Standards of Performance for Lime Manufacturing Plants**

**40 CFR 64, Compliance Assurance Monitoring (CAM)**

### STATE-ORIGIN REQUIREMENT:

**401 KAR 63:020, Potentially hazardous matter or toxic substances**

#### **1. Operating Limitations:**

- a. Prior to the installation and start-up of the Dry Sorbent Injection (DSI) system DSI-04, **EP 07 01** must be operated in accordance with the requirements of **Section H, Alternate Operating Scenario for Emission Group 9 – Rotary Lime Kiln #4**. [401 KAR 52:020, Section 10]
  - 1) Upon installation and start-up of the DSI-04 or prior to July 16, 2027, whichever is earlier, the requirements of **Section H, Alternate Operating Scenario for Emission Group 9 – Rotary Lime Kiln #4** will no longer be applicable.
- b. Lime production from Rotary Kiln #4 shall not exceed 46 tons per hour. [401 KAR 51:017]

#### **Compliance Demonstration Method:**

Compliance shall be demonstrated through **4. Specific Monitoring Requirements** c.

- c. Following the installation and start-up of the Dry Sorbent Injection (DSI) system DSI-04, at all times that Rotary Kiln #4 is operating the DSI system must also be in operation. [401 KAR 52:020, Section 10]
  - 1) The permittee must maintain the 3-hour block dry sorbent flow rate greater than or equal to the flow rate operating limit established during the most recent performance test accepted by the Division, for hydrochloric acid (HCl).

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Compliance Demonstration Method:

Compliance shall be demonstrated through **4. Specific Monitoring Requirements** e. and **5. Specific Recordkeeping Requirements** f.

- d. The only solid fuel permissible in the kiln is coal. [401 KAR 51:017]
  - 1) Coal with less than an average heating value of 12,900 Btu/lb or the average for the coal burned during a prior passing compliance demonstration for the nitrogen oxide (NO<sub>x</sub>), carbon monoxide (CO), particulate matter (PM), and sulfur dioxide (SO<sub>2</sub>) emission limits, whichever is lower, shall not be burned. For the purposes of this condition, average heating value is defined as the weighted average heating value in the coal from all shipments received in each month on a dry weight basis.
  - 2) Coal with more than an average sulfur content of either 0.9% or the average for the coal burned during a prior passing compliance demonstration for the NO<sub>x</sub>, CO, PM, and SO<sub>2</sub> emission limits, whichever is higher, shall not be burned. For the purposes of this condition, average sulfur content is defined as the weighted average sulfur content in the coal from all shipments received in each month on a dry weight basis.

### Compliance Demonstration Method:

In determining compliance with the sulfur content limitation and heating value of the coal, the permittee may obtain certification from the supplier or test one sample of coal as received or shipped in. When the facility combusts coal with an average heating value less than allowed or a sulfur content more than allowed, the facility shall submit a protocol within 30 days of the end of the month the excursion occurs to conduct performance testing to demonstrate compliance with the NO<sub>x</sub>, CO, PM, and SO<sub>2</sub> emission limits.

## 2. Emission Limitations:

- a. Particulate Matter Emissions:
  - 1) The permittee shall not exceed 0.597 lb/ton of stone feed (lb/tsf). [40 CFR 60.342(a)(1)]
  - 2) Gases discharged into the atmosphere shall not exhibit greater than 15 percent opacity when exiting from a dry emission control device. [40 CFR 60.342(a)(2); 401 KAR 59:010, Section 3(1)(a) subsumed; 401 KAR 51:017]
  - 3) Emissions of particulate matter shall not exceed 0.12 lb/ton of stone feed (lb/tsf) except during startup and shutdown. Weighted average emissions of particulate matter must not exceed 0.12 lb/tsf and may be determined according to the equation below: [401 KAR 52:020, Section 10]
 
$$E_T = \sum_{i=1}^n E_i P_i / \sum_{i=1}^n P_i$$

Where:

$E_T$  = emission rate of PM from all kilns and coolers, lb/ton of stone feed

$E_i$  = emission rate of PM from kiln i, or from kiln/cooler combination i, lb/ton of stone feed

$P_i$  = stone feed rate to kiln i, ton/hr

$n$  = number of kilns included in averaging
- b. Sulfur dioxide emissions shall not exceed 25.097 lb/hr. [401 KAR 51:017]

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- c. Nitrogen dioxide emissions shall not exceed 174.80 lb/hr. [401 KAR 51:017]
- d. Carbon monoxide emissions shall not exceed 128.80 lb/hr. [401 KAR 51:017]
- e. Refer to **Section D.3. Source Emissions Limitations** for HAP emission limitations.

**Compliance Demonstration Method:**

- 1) Compliance with **2. Emission Limitations a.1) and 3)** shall be demonstrated through performance testing required under **3. Testing Requirements c.**
- 2) Compliance with **2. Emission Limitations a.2)** shall be demonstrated through **4. Specific Monitoring Requirements a.**
- 3) Compliance with **2. Emission Limitations b – d** shall be demonstrated through performance testing required under **3. Testing Requirements d and e.**
- 4) Refer to **Section D.3. Source Emissions Limitations** Compliance Demonstration Method for compliance with **2. Emission Limitations e.**
- 5) When required for comparison with the particulate matter emission limit, emission rates shall be calculated using the following equation: [40 CFR 60.344(b)(1)]  
$$E = (c_s Q_{sd}) / PK$$

Where:

  - E = emission rate of particulate matter, lb/ton of stone feed
  - $c_s$  = concentration of particulate matter, g/dscf
  - $Q_{sd}$  = volumetric flow rate of effluent gas, dscf/hr
  - P = stone feed rate, ton/hr
  - K = conversion factor, 7000gr/lb
- 6) In determining the particulate matter concentration ( $c_s$ ) and the volumetric flow rate ( $Q_{sd}$ ) of the effluent gas: [40 CFR 60.344(b)(2)]
  - i) U.S. EPA Reference Method 5 shall be used at negative-pressure fabric filters and other types of control devices and U.S. EPA Reference Method 5D shall be used at positive-pressure fabric filters.
  - ii) The sampling time and sample volume for each run shall be at least 60 minutes and 31.8 dscf.
  - iii) The stone feed rate for each run shall be determined using the monitoring device specified in **3. Testing Requirements b.**
- f. For emissions from a control device or stack the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A:  
[401 KAR 59:010, Section 3(2)]
  - 1) For  $P \leq 0.5$  ton/hr:  $E = 2.34$
  - 2) For P from 0.5 ton/hr to 30 ton/hr:  $E = 3.59P^{0.62}$
  - 3) For  $P > 30$  ton/hr:  $E = 17.31P^{0.16}$

Where:

  - E = rate of emission in lb/hr and;
  - P = process weight rate in tons/hr

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Compliance Demonstration Method:**

The emission point listed above is assumed to be in compliance with the PM emission limit when the control devices listed above are used in conjunction with the associated emission point and properly maintained. Refer to **4. Specific Monitoring Requirements**.

- g. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

**Compliance Demonstration Method:**

The Division determines that the source is in compliance with the 401 KAR 63:020 standard based on the rates of emissions of airborne toxics provided in the application submitted by the source.

**3. Testing Requirements:**

- a. Testing shall be conducted in accordance with 401 KAR 50:045, Performance Tests. The testing shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at the pollutant-specific emissions unit. [401 KAR 50:045, Section 1]
- b. For the purpose of conducting a performance test, the permittee shall install, calibrate, maintain, and operate a device for measuring the mass rate of stone feed to each rotary lime kiln. The measuring device used must be accurate to within  $\pm 5$  percent of the mass rate over its operating range. [40 CFR 60.343(d)]. The mass rate of stone feed may be calculated for each 24-hour block period based on the lime production, multiplied by a suitable factor to arrive at the equivalent stone feed rate. The methodology for defining the stone feed to lime production factor shall be established during particulate matter performance tests.
- c. Conduct a performance test in accordance with U.S. EPA Reference Method 5 for particulate matter within 5 years following the initial performance test and within 5 years following each subsequent performance test thereafter. [401 KAR 50:045, Section 1]
- d. Performance testing in accordance with U.S. EPA Reference Method 6C for sulfur dioxide, U.S. EPA Reference Method 7E for nitrogen oxide, and U.S. EPA Reference Method 10 for carbon monoxide as specified in 401 KAR 50:015 shall be conducted once per permit term and as required by the Division. [401 KAR 50:045, Section 1]
- e. During performance testing, the permittee shall obtain one representative fuel sample per hour. These samples collectively shall be analyzed for the percent sulfur content and heating value (Btu/lb). [401 KAR 50:045, Section 1]

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- f. Performance testing in accordance with U.S. EPA Reference Method 320 for hydrogen chloride (HCl) shall be conducted within 180 days following the installation and start-up of the DSI system but no later than July 16, 2027. The emissions of HCl from the lime kiln must be measured using either: [401 KAR 52:020, Section 10]
  - 1) U.S. EPA Reference Method 320 of appendix A to 40 CFR Part 63, or
  - 2) As an alternative to U.S. EPA Reference Method 320 of Appendix A, ASTM D6348-03 (Reapproved 2010) including Annexes A1 through A8 (incorporated by reference—see 40 CFR 63.14). ASTM D6348-12e1 (incorporated by reference—see 40 CFR 63.14) is an acceptable alternative to U.S. EPA Reference Method 320 of appendix A, provided that the following provisions are followed:
    - i) The test plan preparation and implementation in the Annexes to ASTM D6348-03 (Reapproved 2010), Sections A1 through A8 are mandatory.
    - ii) In ASTM D6348-03 (Reapproved 2010) Annex A5 (Analyte Spiking Technique), the percent recovery (%R) must be determined for each target analyte (Equation A5.5). In order for the test data to be acceptable for a compound, %R must be greater than or equal to 70 percent and less than or equal to 130 percent. If the %R value does not meet this criterion for a target compound, the test data are not acceptable for that compound and the test must be repeated for that analyte (i.e., the sampling and/or analytical procedure should be adjusted before a retest). The %R value for each compound must be reported in the test report, and all field measurements must be corrected with the calculated %R value for that compound by using the following equation:  $\text{Reported Results} = ((\text{Measured Concentration in the Stack})/(\%R) \times 100$ ; or
  - 3) U.S. EPA Reference Method 321 of appendix A to 40 CFR Part 63.
- g. In addition, the permittee shall comply with the following: [401 KAR 52:020, Section 10]
  - 1) The performance test must consist of three separate runs and the test duration of each run must be at least one hour.
  - 2) Subsequent performance testing must be conducted within 5 years following the initial performance test and within 5 years following each subsequent performance test thereafter.
  - 3) Refer to Section G.4 and G.5 for additional requirements.
- h. For the purposes of conducting HCl performance testing, the permittee shall install, calibrate, maintain, and operate a mass flow rate monitor for measuring the dry sorbent injection rate and must meet the following requirements: [401 KAR 52:020, Section 10]
  - 1) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.
  - 2) Install and calibrate the device in accordance with manufacturer's procedures and specifications.
  - 3) At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.
- i. During the HCl performance testing, the permittee must establish the 3-hour block average operating limit for the dry sorbent flow rate using data from the dry sorbent mass flow rate monitor according to the following: [401 KAR 52:020, Section 10]



**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 1) Continuously record the dry sorbent flow rate during the performance test and include the dry sorbent flow rate record(s) in the performance test report.
  - 2) Determine the average dry sorbent flow rate value for each 15-minute period of each test run.
  - 3) Calculate the test run average for the dry sorbent flow rate by taking the average of all the 15-minute dry sorbent flow rate values for the run.
  - 4) Calculate the 3-hour operating limit by taking the average of the three test run averages.
- j. During the HCl performance testing, the permittee must establish the emission rate of HCl, the uncontrolled HCl emission factor, the controlled HCl emission factor, and the control efficiency of the DSI system. [401 KAR 52:020, Section 10]
- 1) The HCl emission rate shall be calculated using the following equation:
$$E = \frac{(C_k Q_k + C_c Q_c)}{KP}$$
Where:  
E = emission rate of HCl pounds per ton (lb/ton) of lime produced  
C<sub>k</sub> = concentration in the kiln effluent of HCl, parts per million by volume on a dry basis (ppmvd) from the stack test  
Q<sub>k</sub> = volumetric flow rate of kiln effluent gas, dry standard cubic feet per hour (dscf/hr)  
C<sub>c</sub> = concentration in the cooler effluent of HCl, ppmvd. This value is zero if there is not a separate cooler exhaust to the atmosphere.  
Q<sub>c</sub> = volumetric flow rate of cooler effluent gas, dscf/hr. This value is zero if there is not a separate cooler exhaust to the atmosphere.  
P = lime production rate, tons per hour (ton/hr)  
K = conversion factor for HCl 1.09x10<sup>7</sup> ppmvd HCl per lb/dscf HCl
  - 2) The HCl uncontrolled and controlled emission rate shall also be calculated in pounds per hour (lb/hr).
- k. Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

**4. Specific Monitoring Requirements:**

- a. The permittee shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the opacity of a representative portion of the gases discharged into the atmosphere from each kiln. The span of this system shall be set at 40 percent (40%) opacity. [40 CFR 60.343(a)]
- b. For each emission point equipped with an add-on air pollution control device, inspect each capture/collection and closed vent system at least once each calendar year and record the results of each inspection. [401 KAR 52:020, Section 10]
- c. The amount of material placed in the kiln (tons), amount of lime produced from the kiln (tons), amount of coal fired, diesel oil consumed for startups, and hours of operation shall be monitored and recorded on a monthly basis. [401 KAR 52:020, Section 10]

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- d. In the absence of certification of the sulfur content of the coal from the supplier, the owner or operator shall obtain representative samples from each delivery of coal. These samples collectively shall be analyzed for the percent sulfur content and heating value (Btu/lb). [401 KAR 51:017]
- e. The permittee shall monitor and record the dry sorbent injection flow rate at least once per shift to ensure that it does not fall below the 3-hour block dry sorbent injection rate established during the most recent performance test for HCl. [401 KAR 52:020, Section 10]
- f. If the dry sorbent injection flow rate falls below the 3-hour block dry sorbent injection rate established during the most recent performance test for HCl, the permittee shall assume zero control efficiency for that entire shift, while calculating emissions as required in Section D.

**5. Specific Recordkeeping Requirements:**

- a. The permittee shall maintain records of inspection of each capture/collection and closed vent system. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of all routine and non-routine maintenance activities performed on the baghouse and DSI system. These records shall include, at a minimum, the date, the name(s) of the person or organization performing the maintenance, and a description of the maintenance completed. [401 KAR 52:020, Section 10]
- c. The permittee must keep visual observation records and U.S. EPA Reference Method 9 observation records, and any inspections and repair records in a designated paper or electronic logbook. Records shall be maintained for five years. [401 KAR 52:020, Section 10]
- d. Records of the amount of material placed in the kiln (ton), amount of lime produced from the kiln (ton) processed, amount of coal fired, diesel oil consumed for startups, and hours of operation on a monthly basis shall be maintained. [401 KAR 52:020, Section 10]
- e. Records of the heat content (Btu/lb) and sulfur content (percent) of coal sampled each month shall be maintained. [401 KAR 51:017]
- f. Records of the dry sorbent injection flow rate measured once per shift shall be maintained. [401 KAR 52:020, Section 10]

**6. Specific Reporting Requirements:**

- a. Submit reports of excess emissions of all 6-minute periods during which the average opacity of the visible emissions from any lime kiln utilizing a continuous monitoring system is greater than 15 percent. [40 CFR 60.343(e)]
- b. Refer to **Section F** and **Section G.5** for additional requirements.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**7. Specific Control Equipment Operating Conditions:**

- a. The baghouse and DSI system shall be operated to maintain compliance with permitted emission limitations, consistent with manufacturer's specifications and standard operating practices. [401 KAR 50:055, Section 2]
- b. Records regarding the maintenance of the dust collection system and DSI system shall be maintained. [401 KAR 52:020, Section 10]

**8. Alternate Operating Scenarios:**

Refer to **Section H, Alternate Operating Scenario for Emission Group 9 – Rotary Lime Kiln #4** for requirements that apply to **EP 07 01** prior to the installation and start-up of the Dry Sorbent Injection (DSI) system DSI-04.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Emission Group 8: KL01, KL02, KL03 – Rotary Kilns

EP	Name	Capacity (tons/hr)	Construction Date	Control Device
06 01	Rotary Lime Kiln #1 KVS (17' X 203') Primary Fuel: Pulverized Coal, Startup Fuel: Diesel Oil	50	7/1/1976	Multi-Cyclone (Flex-Kleen Model 35C-24 Cyclotrell Series 5); Reverse-Air Baghouse (American Air Filter Model Amertherm Collector); Dry Sorbent Injection Systems (DSI-01, DSI-02, and DSI-03)
06 02	Rotary Lime Kiln #2 KVS (17' X 203') Primary Fuel: Pulverized Coal, Startup Fuel: Diesel Oil	50		
06 03	Rotary Lime Kiln #3 KVS (17' X 203') Primary Fuel: Pulverized Coal, Startup Fuel: Diesel Oil	50		

### APPLICABLE REGULATIONS:

**401 KAR 59:010, New process operations**

**40 CFR 64, Compliance Assurance Monitoring (CAM)**

### STATE-ORIGIN REQUIREMENT:

**401 KAR 63:020, Potentially hazardous matter or toxic substances**

#### **1. Operating Limitations:**

- a. Prior to the installation and start-up of the Dry Sorbent Injection (DSI) systems DSI-01, DSI-02, and DSI-03, **EP 06 01 – EP 06 03** must be operated in accordance with the requirements of **Section H, Alternate Operating Scenario for Emission Group 8 – Rotary Lime Kilns #1 through #3**. [401 KAR 52:020, Section 10]
  - 1) Upon installation and start-up of DSI-01, DSI-02, and DSI-03 or prior to July 16, 2027, whichever is earlier, the requirements of **Section H, Alternate Operating Scenario for Emission Group 8 – Rotary Lime Kilns #1 through #3** will no longer be applicable.
- b. Following the installation and start-up of the Dry Sorbent Injection (DSI) systems DSI-01, DSI-02, and DSI-03, at all times that Rotary Kilns #1 – #3 are operating the corresponding DSI system must also be operating. [401 KAR 52:020, Section 10]
  - 1) The permittee must maintain the 3-hour block dry sorbent flow rate for each DSI system greater than or equal to the flow rate operating limit established during the most recent performance test for HCl.

#### **Compliance Demonstration Method:**

Compliance shall be demonstrated through **4. Specific Monitoring Requirements** e. and **5. Specific Recordkeeping Requirements** e.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations:**

- a. Emissions of particulate matter shall not exceed 0.12 lb/ton of stone feed (lb/tsf) except during startup and shutdown. Weighted average emissions of particulate matter must not exceed 0.12 lb/tsf and may be determined according to the equation below: [401 KAR 52:020, Section 10]

$$E_T = \sum_{i=1}^n E_i P_i / \sum_{i=1}^n P_i$$

Where:

$E_T$  = emission rate of PM from all kilns and coolers, lb/ton of stone feed

$E_i$  = emission rate of PM from kiln i, or from kiln/cooler combination i, lb/ton of stone feed

$P_i$  = stone feed rate to kiln i, ton/hr

n = number of kilns included in averaging

- b. For emissions from a control device or stack the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A:

[401 KAR 59:010, Section 3(2)]

1) For  $P \leq 0.5$  ton/hr:

$$E = 2.34$$

2) For P from 0.5 ton/hr to 30 ton/hr:

$$E = 3.59P^{0.62}$$

3) For  $P > 30$  ton/hr:

$$E = 17.31P^{0.16}$$

Where:

E = rate of emission in lb/hr and;

P = process weight rate in tons/hr

- c. Any continuous emissions into the open air shall not equal or exceed twenty percent (20%) opacity. [401 KAR 59:010, Section 3(1)(a)]
- d. Refer to **Section D.3. Source Emissions Limitations** for HAP emission limitations.
- e. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

**Compliance Demonstration Method:**

- 1) The emission points listed above are assumed to be in compliance with the PM emission limit when the control devices listed above are used in conjunction with the associated emission point and properly maintained. Refer to **4. Specific Monitoring Requirements**.
- 2) For compliance with the opacity limitations, refer to **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements**.
- 3) Refer to **Section D.3. Source Emissions Limitations** Compliance Demonstration Method for compliance with **2. Emission Limitations** c.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 4) The Division determines that the source is in compliance with the 401 KAR 63:020 standard based on the rates of emissions of airborne toxics provided in the application submitted by the source.

**3. Testing Requirements:**

- a. Testing shall be conducted in accordance with 401 KAR 50:045, Performance Tests. The testing shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at the pollutant-specific emissions unit. [401 KAR 50:045, Section 1]
- b. Conduct a performance test in accordance with U.S. EPA Reference Method 5 for particulate matter within 5 years following the initial performance test and within 5 years following each subsequent performance test thereafter. [401 KAR 50:045, Section 1]
- c. Performance testing in accordance with U.S. EPA Reference Method 320 for hydrogen chloride (HCl) shall be conducted within 180 days following the installation and start-up of each DSI system. The emissions of HCl from the lime kiln must be measured using either: [401 KAR 52:020, Section 10]
  - 1) U.S. EPA Reference Method 320 of appendix A to 40 CFR Part 63, or
  - 2) As an alternative to U.S. EPA Reference Method 320 of Appendix A, ASTM D6348-03 (Reapproved 2010) including Annexes A1 through A8 (incorporated by reference—see 40 CFR 63.14). ASTM D6348-12e1 (incorporated by reference—see 40 CFR 63.14) is an acceptable alternative to U.S. EPA Reference Method 320 of appendix A, provided that the following provisions are followed:
    - i) The test plan preparation and implementation in the Annexes to ASTM D6348-03 (Reapproved 2010), Sections A1 through A8 are mandatory.
    - ii) In ASTM D6348-03 (Reapproved 2010) Annex A5 (Analyte Spiking Technique), the percent recovery (%R) must be determined for each target analyte (Equation A5.5). In order for the test data to be acceptable for a compound, %R must be greater than or equal to 70 percent and less than or equal to 130 percent. If the %R value does not meet this criterion for a target compound, the test data are not acceptable for that compound and the test must be repeated for that analyte (i.e., the sampling and/or analytical procedure should be adjusted before a retest). The %R value for each compound must be reported in the test report, and all field measurements must be corrected with the calculated %R value for that compound by using the following equation: Reported Results = ((Measured Concentration in the Stack))/(%R) × 100; or
  - 3) U.S. EPA Reference Method 321 of appendix A to 40 CFR Part 63.
- d. In addition, the permittee shall comply with the following: [401 KAR 52:020, Section 10]
  - 1) The performance test must consist of three separate runs and the test duration of each run must be at least one hour.
  - 2) Subsequent performance testing must be conducted within 5 years following the initial performance test and within 5 years following each subsequent performance test thereafter.
  - 3) Refer to Section G.4 and G.5 for additional requirements.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- e. For the purposes of conducting HCl performance testing, the permittee shall install, calibrate, maintain, and operate a mass flow rate monitor for measuring the dry sorbent injection rate of each DSI system and must meet the following requirements: [401 KAR 52:020, Section 10]
- 1) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.
  - 2) Install and calibrate the device in accordance with manufacturer's procedures and specifications.
  - 3) At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.
- f. During the HCl performance testing, the permittee must establish the 3-hour block average operating limit for the dry sorbent flow rate for each DSI system using data from each dry sorbent mass flow rate monitor according to the following: [401 KAR 52:020, Section 10]
- 1) Continuously record the dry sorbent flow rate during the performance test and include the dry sorbent flow rate record(s) in the performance test report.
  - 2) Determine the average dry sorbent flow rate value for each 15-minute period of each test run.
  - 3) Calculate the test run average for the dry sorbent flow rate by taking the average of all the 15-minute dry sorbent flow rate values for the run.
  - 4) Calculate the 3-hour operating limit by taking the average of the three test run averages.
- g. During the HCl performance testing, the permittee must establish for each kiln the emission rate of HCl, the uncontrolled HCl emission factors, the controlled HCl emission factors, and the control efficiencies of each DSI system. [401 KAR 52:020, Section 10]
- 1) The HCl emission rate shall be calculated using the following equation:
$$E = \frac{(C_k Q_k + C_c Q_c)}{KP}$$
Where:  
E = emission rate of HCl pounds per ton (lb/ton) of lime produced  
C<sub>k</sub> = concentration in the kiln effluent of HCl, parts per million by volume on a dry basis (ppmvd) from the stack test  
Q<sub>k</sub> = volumetric flow rate of kiln effluent gas, dry standard cubic feet per hour (dscf/hr)  
C<sub>c</sub> = concentration in the cooler effluent of HCl, ppmvd. This value is zero if there is not a separate cooler exhaust to the atmosphere.  
Q<sub>c</sub> = volumetric flow rate of cooler effluent gas, dscf/hr. This value is zero if there is not a separate cooler exhaust to the atmosphere.  
P = lime production rate, tons per hour (ton/hr)  
K = conversion factor for HCl 1.09x10<sup>7</sup> ppmvd HCl per lb/dscf HCl
  - 2) The HCl uncontrolled and controlled emission rate shall also be calculated in pounds per hour (lb/hr).
- h. Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****4. Specific Monitoring Requirements:**

- a. Install, calibrate, maintain, and operate a monitoring device to measure the static pressure drop across the kiln baghouse. The monitoring device shall be read, and the reading recorded once per week during operation of the unit. [401 KAR 52:020, Section 10]
- b. Following a reading outside of the pressure drop range specified in the OM&M: [401 KAR 52:020, Section 10]
  - 1) Maintenance personnel will inspect the baghouse and operations immediately and make needed repairs as soon as practicable.
  - 2) Upon completed corrective action, the permittee shall take a follow-up differential pressure reading and ensure the pressure drop has returned to normal range.
- c. The amount of material placed in the kiln (tons), amount of lime produced from the kiln (tons), amount of coal fired, diesel oil consumed for startups, and hours of operation shall be monitored and recorded on a monthly basis. [401 KAR 52:020, Section 10]
- d. For each emission point equipped with an add-on air pollution control device, inspect each capture/collection and closed vent system at least once each calendar year and record the results of each inspection. [401 KAR 52:020, Section 10]
- e. The permittee shall monitor and record the dry sorbent injection flow rate for each DSI system at least once per shift to ensure that it does not fall below the 3-hour block dry sorbent injection rate established during the most recent performance test for HCl. [401 KAR 52:020, Section 10]
- f. If the dry sorbent injection flow rate falls below the 3-hour block dry sorbent injection rate established during the most recent performance test for HCl, the permittee shall assume zero control efficiency for that entire shift, while calculating emissions as required in Section D.

**5. Specific Recordkeeping Requirements:**

- a. Maintain records of all routine and non-routine maintenance activities performed on the baghouse and DSI systems. These records shall include, at a minimum, the date, the name(s) of the person or organization performing the maintenance, and a description of the maintenance completed. [401 KAR 52:020, Section 10]
- b. Keep visual observation records and U.S. EPA Reference Method 9 observation records, and any inspections and repair records in a designated paper or electronic logbook. Records shall be maintained for five years. [401 KAR 52:020, Section 10]
- c. Maintain records of the weekly differential pressure readings on the kiln baghouse. Records shall, at a minimum, include the date and time of the reading, and the reading value. Records shall also include information on any corrective actions taken when readings outside the appropriate range are recorded. [401 KAR 52:020, Section 10]



## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- d. Maintain records of the amount of material placed in the kiln (ton), amount of lime produced from the kiln (ton) processed, amount of coal fired, diesel oil consumed for startups, and hours of operation on a monthly basis. [401 KAR 52:020, Section 10]
- e. Records of the dry sorbent injection flow rate measured once per shift for each DSI system shall be maintained. [401 KAR 52:020, Section 10]

### **6. Specific Reporting Requirements:**

Refer to **Section F** and **Section G.5**.

### **7. Specific Control Equipment Operating Conditions:**

- a. The baghouse and DSI systems shall be operated to maintain compliance with permitted emission limitations, consistent with manufacturer's specifications and standard operating practices. [401 KAR 50:055, Section 2]
- b. Records regarding the maintenance of the dust collection system and DSI systems shall be maintained. [401 KAR 52:020, Section 10]

### **8. Alternate Operating Scenarios:**

Refer to **Section H, Alternate Operating Scenario for Emission Group 8 – Rotary Lime Kilns #1 through #3** for requirements that apply to **EP 06 01 – EP 06 03** prior to the installation and start-up of the Dry Sorbent Injection (DSI) systems DSI-01, DSI-02, and DSI-03.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Emission Group 10: LM01 – Lime Dust Collection Systems

EP	Name	Design Capacity** (tons/hr)	Construction Date
22 01	Serving Transfers (DC-89-044) [From Kilns #1, #2 and #3 Coolers to Conveyors (L-1 & R-1)]	150	1/1/1976
22 02	Serving Transfers (DC-89-045) [From Kilns #1, #2 and #3 Coolers to Conveyors (L-1 & R-1)]	150	1/1/1991
22 03	Serving Transfers (DC-89-046) [From Kilns #4 Coolers to Conveyors (L-1 & R-1)]*	46	7/1/1997
22 04	Serving Kiln Dust Bin (DC-63-018) (63-009)*	25	
22 05	Serving Transfers (DC-89-041) [From Conveyors (L-1, R-1, L-2 & R-2) in Lime Reclaim Building]	260	1/1/2002
22 06	Serving Transfers (DC-89-042) [From Conveyor (L-2) to Conveyor (L-3)]	260	
22 07	Serving Transfers (DC-89-043) [From Conveyor (L-3) to Conveyor (L-4), Silos #1, #2 and #3]	260	1/1/2008
22 08	Serving Transfers (DC-94-040) [From Conveyor (L-5) to Conveyor (L-6 or L-7)]	1140	1/1/1976
22 09	Serving Transfers (DC-94-041) [From Conveyor (L-6) to Conveyor (L-6A)]	1140	
22 10	Serving Enclosure Hood (DC-94-044) on Conveyor (L-6A)	1140	7/1/2013
22 11	Serving Transfers (DC-94-042) [From Conveyor (L-6A) to Barge Loading]	1140	7/1/2003
22 12	Serving Fairfield Screening Building Conveyors (DC-94-043)	1140	7/1/1995
22 13	Serving Pebble Bin (BV-94-051)	520	7/1/2006
22 14	Serving Transfers (DC-94-046) [From Conveyor (L-10) to Pebble Bin and Conveyor (L-11)]	520	7/1/1995
22 15	Serving Transfers (DC-94-047) [From Conveyors (L-11 & L-12), Truck and Railcar Loadout]	540	
22 16	Serving Reject Lime Bin Transfers (DC-89-029) [From Conveyors (R-2) to Conveyor (R-3)]	260	7/1/2006
22 17	Serving Reject Lime Reclaim Building (DC-62-031)	60	7/1/2005
22 18	Serving Reject Lime Receiving Building (DC-119-421)	50	7/1/2013
22 19	Serving Quality Prep Lab (DC-66-080)	1	7/1/2009
22 20	DC-01 Serving Milled Lime Screw Conveyors	150	7/31/2023
22 21	DC-02 Serving Transfer from BC L-9 to BC-01	500	
22 22	DC-03 Serving Transfer from Pebble Bin to BC-02	100	
22 23	DC-04 Serving Transfer from BC-02 To Milled Lime Truck & Rail Loadspout	100	

\* Subject to PM BACT Limit of 0.02 gr/acf

\*\* Design capacity values listed are those for the underlying conveyor systems and/or material transfer and handling systems served by the dust collection listed.

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **APPLICABLE REGULATIONS:**

**401 KAR 51:017, Prevention of Significant Deterioration of Air Quality** applies to EP 22 03 and EP 22 04

**401 KAR 59:010, New Process Operations**

**40 CFR 64, Compliance Assurance Monitoring (CAM)**

#### **1. Operating Limitations:**

- a. Except as provided in **1. Operating Limitations b.**, processes may not operate without a corresponding dust collection system also in operation. [401 KAR 52:020, Section 10]
- b. During periods of maintenance on a dust collection system (either planned or taken in response to a malfunction) when its associated conveyor systems inside a building must remain in operation, the following provisions apply: [401 KAR 52:020, Section 10]
  - 1) For any set of dust collection systems serving a given lime handling building (that is defined in LM02), only one of those systems can be taken offline at a time for maintenance if an associated conveyor system inside the building remains in operation. This restriction does not apply if actions are being taken in response to a malfunction.
  - 2) During a malfunction of any dust collection system that is part of a set of dust collection systems serving a given lime handling building, all scheduled maintenance for that set shall be postponed until the malfunctioned system is repaired and operating as intended.
  - 3) Periods of maintenance shall be conducted as expeditiously as possible. The time during which a dust collection system serving an active conveyor is offline for a discrete maintenance event shall not exceed 24 hours.
  - 4) During times of maintenance when a dust collection system must be temporarily shut down while an associated conveyor system inside a building remains in operation, the facility shall:
    - i) Continuously perform visual emissions evaluations consistent with procedures specified in U.S. EPA Reference Method 9 from varying vantage points covering the building in which the operating conveyor system is located. If any visible emissions are observed, take appropriate action to mitigate emissions and initiate a formal U.S. EPA Reference Method 9 opacity test. These tests shall continue until there are again no visible emissions observed. Any readings recorded above 20% shall be documented in the semiannual report. Begin visual observations prior to the dust collector being taken offline and before maintenance activities commence. Continue the observations until the dust collector has returned to normal operation.
    - ii) If any U.S. EPA Reference Method 9 reading exceeds 20%, the dust collector shall be brought back online immediately if possible, or all operations that emit PM captured by that baghouse (conveyers, bins, loadouts, screening area, screens, bucket elevators, and silo transfers) shall be immediately shutdown.
    - iii) The Division may waive the requirement to shut down upon a demonstration that the cause(s) of the opacity has been identified and corrected immediately.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations:**

- a. Emissions from emission points 22 03 and 22 04 shall not exceed 20% opacity. [401 KAR 51:017]

**Compliance Demonstration Method:**

Compliance with the opacity limit is demonstrated through compliance with the opacity limitations for 401 KAR 59:010.

- b. Emissions of particulate matter from emission points 22 03 and 22 04 shall not exceed 0.02 gr/acf. [401 KAR 51:017]

**Compliance Demonstration Method:**

Compliance with the particulate matter (PM) limit is demonstrated through compliance with the PM emission limit for 401 KAR 59:010.

- c. No person shall cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]
- d. For emissions from a control device or stack the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
- |  |                     |
|--|---------------------|
| 1) For $P \leq 0.5$ ton/hr:            | $E = 2.34$          |
| 2) For P from 0.5 ton/hr to 30 ton/hr: | $E = 3.59P^{0.62}$  |
| 3) For $P > 30$ ton/hr:                | $E = 17.31P^{0.16}$ |

Where:

E = rate of emission in lb/hr and;

P = process weight rate in tons/hr

**Compliance Demonstration Method:**

- a. The source is assumed to be in compliance with the PM emission limit, when the control device is operating and properly maintained. Refer to **4. Specific Monitoring Requirements** and **7. Specific Control Equipment Operating Conditions**.
- b. For compliance with the opacity limitations, refer to **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements**.

**3. Testing Requirements:**

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 4. Specific Monitoring Requirements:

- a. Monitor the overall processing rate (tons/hour) for conveying systems served by the dust collections systems between the kiln discharge and lime storage, as defined by total combined kiln production rate and hours of operation on a monthly basis. [401 KAR 52:020, Section 10]
- b. Monitor the overall process rate (tons/hour) for the conveying systems served by the dust collection systems between lime storage and load out, as defined by amount of combined mass of lime loaded out by truck, rail, and barge. [401 KAR 52:020, Section 10]
- c. Comply with the requirements specified below for the listed dust collection systems to meet applicable particulate matter Compliance Assurance Monitoring Requirements. [40 CFR 64]

	<b>Pressure Drop:</b>	<b>Visible Emissions:</b>
Indicator:	Measurement of the resistance of flow across the fabric filter as the gas passes through the filter and filter cake.	Opacity of emissions are related to the size and concentration of particles in the exhaust gas.
Measurement Approach:	Personnel will monitor the differential pressure across the fabric filter. Alternatively, the permittee may install, calibrate, maintain and operate a monitoring device to continuously monitor the differential pressure across the fabric filter.	A qualitative visual observation (QVO) is conducted daily by knowledgeable observers.
Indicator Range:	While the unit is operating, the indicator range shall be between 1.0" - 9.0".	While operating, a daily QVO will be completed. Presence of visible emissions will trigger an immediate determination of opacity using U.S. EPA Reference Method 9, or in lieu of determining the opacity using Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions.
Excursion defined:	An excursion is defined as a differential pressure reading outside the indicator range.	An excursion is defined as visible emissions equal to or greater than 20 percent opacity for any fifteen (15) second interval using the procedures of U.S. EPA Reference Method 9.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

	<b>Pressure Drop:</b>	<b>Visible Emissions:</b>
Excursion Follow-up:	Following an excursion, the permittee shall conduct a physical inspection of the fabric filter to determine and immediately correct any revealed performance issues.	Following an excursion, the permittee will implement corrective measures. Any maintenance and repairs will be performed on the control device to restore the dust collection systems to operate consistent with good engineering practices.
QA/QC Procedures:	Differential pressure across the fabric filter is read using a manometer or similar type gauge. If necessary, the gauge shall be recalibrated to zero when the dust collection system is shut down for maintenance.	The person responsible for making QVO and Reference U.S. EPA Reference Method 9 observations will be certified in accordance with U.S. EPA Reference Method 9.
Monitoring Frequency:	Personnel will monitor the differential pressure across the fabric filter once per shift and at least once every twelve hours of operation, except when not in operation.	Daily
Data Collection Procedures:	If a continuous monitoring device is installed, the source data from each monitoring device shall record a data point once per day. If an electronic system is not installed, the differential pressure will be read manually from the gauge and recorded.	Daily QVOs shall be maintained and shall include the time and date of the assessment, an indication of any visible emissions and the name of the person conducting the QVO. U.S. EPA Reference Method 9 results will be documented in the format shown in Figure 9-1 of Method 9.

### 5. Specific Recordkeeping Requirements:

- a. Maintain records of visible emission observations required under **4. Specific Monitoring Requirements** c indicating for each observation the date and time, name of observer, standing position, weather conditions, whether any emissions were visible, the suspected or known cause of any visible emissions observed, corrective actions taken to mitigate any visible emissions observed and results of the U.S. EPA Reference Method 9 readings. [40 CFR Part 64, 401 KAR 52:020, Section 10]
- b. Maintain records of the differential pressure readings on the dust collection systems. Records shall, at a minimum, include the date and time of the reading, the data collection method, the differential pressure range, the reading value, and, for direct observations, the person collecting the reading. Records shall also include information on any corrective actions taken when readings outside the appropriate range are recorded. [40 CFR Part 64, 401 KAR 52:020, Section 10]
- c. Maintain records of all dust collection systems inspections, repair activities or corrective actions performed on the dust collection systems due to malfunction. These records shall

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

include, at a minimum, the date, and the name of the person or organization performing the repair or corrective action, and a description of the repair or corrective action completed. [401 KAR 52:020, Section 10]

- d. Maintain records of the total combined kiln production rate and the amount of combined mass of lime loaded out by truck, rail, and barge (tons/month) on a monthly basis. [401 KAR 52:020, Section 10]
- e. Maintain records of U.S. EPA Reference Method 9 readings required under **4. Specific Monitoring Requirements** c indicating for each reading the date and time, name of observer, standing position in location to the building, weather conditions, result of the U.S. EPA Reference Method 9 reading, suspected or known cause of opacity and corrective actions taken to mitigate the emissions observed. [40 CFR Part 64, 401 KAR 52:020, Section 10]

**6. Specific Reporting Requirements:**

Refer to **Section F**

**7. Specific Control Equipment Operating Conditions:**

- a. The dust collection systems shall be operated to maintain compliance with permitted emission limitations, consistent with good engineering practices. [401 KAR 50:055, Section 2]
- b. Records regarding the maintenance of the dust collection systems shall be maintained. [401 KAR 52:020, Section 10]

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Emission Group 7: CL01 – Coal Receiving & Storage

EP	Name	Capacity (tons/hr)	Construction Date	Control Method
05 01	Receiving Hopper & Transfer (BC-54-011) [To Conveyor (C-1)]	500	1/1/1976	Dust Suppression
05 02	Conveyor (C-1) & Transfer (BC-54-001) (30" x 500') [To Conveyor (C-1.5) or #2 Coal Bin]	500		
05 03	Conveyor (C-2) & Transfer (BC-54-002) (30") [To Conveyor (C-3) or #2 Coal Bin]	375		
05 05	Conveyor (C-3) & Transfer (BC-54-006) (30") [To Conveyor (C-4), #4 Coal Bin or #1 Coal Bin]	375		
05 08	Conveyor (C-4) & Transfer (BC-54-006) (30") [To #3 Coal Bin]	375		
19 01	Conveyor (Transverse) (C-1.5) & Transfer (BC-54-007) (30") [To #1 Coal Bin]	500	1/1/2004	
19 04	Coal Loading Transfer Via Front End Loaders [To Receiving Hopper (54-013)]	500		
19 05	Receiving Hopper (Loading) & Transfer (54-013) [To Conveyor (C-2)]	500	1/1/1976	

EP	Name	Capacity (Acre-Years /hr)	Construction Date	Control Method
19 06	Coal Stockpile	4.63E-05	1/1/1976	Dust Suppression

### APPLICABLE REGULATIONS:

**401 KAR 60:005, Section 2(2)(gg), 40 C.F.R. 60.250 through 60.258 (Subpart Y), Standards of Performance for Coal Preparation and Processing Plants**

#### 1. Operating Limitations:

Not Applicable

#### 2. Emission Limitations:

The permittee shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater. [40 CFR 60.254(a)]



**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Compliance Demonstration Method:**

- a. In determining initial compliance with the opacity standards under 40 CFR 60, Subpart Y, the permittee shall use, as directed by 40 CFR 60.255(a) and 40 CFR 60.257(a), U.S. EPA Reference Method 9 of Appendix A-4 of 40 CFR part 60, and the procedures as described in 40 CFR 60.11. [40 CFR 60.255(a) and 40 CFR 60.257(a)]
- b. In demonstrating continuing compliance with the opacity standards under 40 CFR 60, Subpart Y, refer to **4. Specific Monitoring Requirements**.

**3. Testing Requirements:**

- a. The permittee must conduct all performance tests required by 40 CFR 60.8 to demonstrate compliance with the applicable emission standards using the methods identified in 40 CFR 60.257. [40 CFR 60.255(a)]
- b. U.S. EPA Reference Method 9 of appendix A-4 of 40 CFR 60 and the procedures in 40 CFR 60.11 must be used to determine opacity, with the exceptions specified in 40 CFR 60.257(a)(1)(i) and (ii). [40 CFR 60.257(a)(1)]
  - 1) The duration of the U.S. EPA Reference Method 9 of Appendix A-4 of 40 CFR 60 performance test shall be 1 hour (ten 6-minute averages). [40 CFR 60.257(a)(1)(i)]
  - 2) If, during the initial 30 minutes of the observation of a U.S. EPA Reference Method 9 of appendix A-4 of 40 CFR 60 performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes. [40 CFR 60.257(a)(1)(ii)]
- c. To determine opacity for fugitive coal dust emissions sources, the additional requirements in 40 CFR 60.257(a)(2)(i) through (iii) must be used. [40 CFR 60.257(a)(2)]
  - 1) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back. [40 CFR 60.257(a)(2)(i)]
  - 2) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction. [40 CFR 60.257(a)(2)(ii)]
  - 3) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission. [40 CFR 60.257(a)(2)(iii)]
- d. A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified in 40 CFR 60.257(a)(3)(i) through (iii) are met. [40 CFR 60.257(a)(3)]
  - 1) No more than three emission points may be read concurrently. [40 CFR 60.257(a)(3)(i)]
  - 2) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points. [40 CFR 60.257(a)(3)(ii)]
  - 3) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

observer must stop taking readings for the other two points and continue reading just that single point. [40 CFR 60.257(a)(3)(iii)]

- e. Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

**4. Specific Monitoring Requirements:**

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack no less frequently than monthly while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]

**5. Specific Recordkeeping Requirements:**

- a. The permittee shall maintain a log of the qualitative visual observations made as specified in **4. Specific Monitoring Requirements** including the date, time, initials of observer, whether any emissions were observed (yes/no), and any U.S. EPA Reference Method 9 readings taken. [401 KAR 52:020, Section 10]
- b. Records shall be kept onsite with hard or electronic copies (whichever is requested) of the logbook available to the Division upon request.

**6. Specific Reporting Requirements:**

- a. Pursuant to 40 CFR 60.258(b)(3), for the purpose of reports required under 40 CFR 60.7(c), any owner or operator subject to the provisions of 40 CFR 60, Subpart Y also shall report semiannually periods of excess emissions: All 6-minute average opacities that exceed the applicable standard.
- b. Pursuant to 40 CFR 60.258(c), the permittee of an affected facility shall submit the results of initial performance tests to the Division, consistent with the provisions of section 60.8. The permittee who elects to comply with the reduced performance testing provisions of sections 40 CFR 60.255(d) or (e) shall include in the performance test report identification of each affected facility that will be subject to the reduced testing. The permittee electing to comply with section 40 CFR 60.255(e) shall also include information which demonstrates that the control devices are identical.
- c. Pursuant to 40 CFR 60.258(d), after July 1, 2011 within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with 40 CFR 60, Subpart Y, the permittee of the affected facility must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at <http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main>. For performance tests that cannot be entered into WebFIRE (i.e., U.S. EPA Reference Method 9 of appendix A-4 of 40 CFR part 60 opacity performance tests) the permittee of the affected facility must mail

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Emission Group 3: LS03 – Limestone Screening and Crushing

EP	Name	Capacity (tons/hr)	Construction Date	Control Method
17 01	Conveyor (LS-5C) & Transfer (BC-51-006) (36" x 530') [To Conveyor (LS-5T)]	825	1/1/2004	Dust Suppression
18 01	Transfer (42" x 22') [From Screening and Crushing Building Operations to Conveyor (LS-5C)]	1000		
20 04	Loader Hopper Transfer (51-012) [To Conveyor (LS-4A)]	625		
21 01	Conveyor (LS-4A) & Transfer (BC-51-011) [To Conveyor (LS-4)]	625		

### APPLICABLE REGULATIONS:

**401 KAR 60:005, Section 2(2)(qqq) 40 C.F.R. 60.670 through 60.676, Tables 1 through 3 (Subpart OOO), Standards of Performance for Nonmetallic Mineral Processing Plants.**

#### **1. Operating Limitations:**

Not Applicable

#### **2. Emission Limitations:**

- a. Fugitive emissions from any affected facility shall not exhibit greater than ten percent (10%) opacity, each, except as specified in **2. Emission Limitations b.**, below. [40 CFR 60.672(b), Table 3 to 40 CFR 60, Subpart OOO]
- b. Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of 40 CFR 60.672. [40 CFR 60.672(d)]

#### **Compliance Demonstration Method:**

The permittee must demonstrate compliance with these limits by conducting an initial performance test according to 40 CFR 60.11 and 40 CFR 60.675. [Table 3 to 40 CFR 60, Subpart OOO]

#### **3. Testing Requirements:**

- a. For the U.S. EPA Reference Method 9 testing listed under 40 CFR 60.675(c), if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used: [40 CFR 60.675(e)(1)]
  - 1) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emission stream. [40 CFR 60.675(e)(1)(i)]

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 2) Separate the emissions so that the opacity of emissions from each affected facility can be read. [40 CFR 60.675(e)(1)(ii)]
- b. A single emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met: [40 CFR 60.675(e)(2)]
  - 1) No more than three emission points may be read concurrently. [40 CFR 60.675(e)(2)(i)]
  - 2) All three emission points must be within a seventy degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points. [40 CFR 60.675(e)(2)(ii)]
  - 3) If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point. [40 CFR 60.675(e)(2)(iii)]
- c. If the initial performance test date for an affected facility falls during a seasonal shutdown (as defined in 40 CFR 60.671) of the affected facility, then with approval from the Administrator, the owner or operator may postpone the initial performance test until no later than sixty calendar days after resuming operation of the affected facility. [40 CFR 60.675(i)]
- d. For U.S. EPA Reference Method 9 performance tests used to determine opacity, the following additions apply: [40 CFR 60.675(c)(1)]
  - 1) The minimum distance between the observer and the emission source shall be 15 feet. [40 CFR 60.675(c)(1)(i)]
  - 2) The observer shall, when possible, select a position that minimizes interference from other fugitive emissions sources (e.g. road dust). The required observer position relative to the sun (U.S. EPA Reference Method 9 of Appendix A-4 of 40 CFR part 60, Section 2.1) must be followed. [40 CFR 60.675(c)(1)(ii)]
  - 3) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible. [40 CFR 60.675(c)(1)(iii)]
- e. For U.S. EPA Reference Method 9 performance tests used to determine compliance with the opacity standards, above, the duration of the Method 9 observations shall be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emissions limits shall be based on the average of the five 6-minute averages. [40 CFR 60.675(c)(3)]
- f. Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

**4. Specific Monitoring Requirements:**

The permittee shall conduct monthly visual observations to ensure the equipment is operating as intended for control of dust emissions. [401 KAR 52:020, Section 10]

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Specific Recordkeeping Requirements:**

- a. The permittee shall maintain a record of monthly visual observations, corrective actions taken, if any, the date of the observations (mm/dd/yyyy) and the initials of the observer. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of the U.S. EPA Reference Method 9 readings, including results, emission unit ID (number or name), date (mm/dd/yyyy), time, weather conditions, and trained Method 9 operator who performed the reading. [401 KAR 52:020, Section 10]
- c. Records shall be kept onsite with hard or electronic copies (whichever is requested) of the logbook available to the Division upon request. [401 KAR 52:020, Section 10]

**6. Specific Reporting Requirements:**

- a. The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in 40 CFR 60.672 of 40 CFR 60, Subpart OOO, including reports of opacity observations made using U.S. EPA Reference Method 9 (40 CFR part 60, appendix A-4) to demonstrate compliance with 40 CFR 60.672(b), (e) and (f). [40 CFR 60.676(f)]
- b. Each owner or operator seeking to comply with 40 CFR 60.670(d) shall submit to the Division the following information about the existing facility being replaced and the replacement piece of equipment. [40 CFR 60.676(a)]
  - 1) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station: [40 CFR 60.676(a)(1)]
    - i) The rated capacity in tons per hour of the existing facility being replaced and [40 CFR 60.676(a)(1)(i)]
    - ii) The rated capacity in tons per hour of the replacement equipment. [40 CFR 60.676(a)(1)(ii)]
  - 2) For a screening operation: [40 CFR 60.676(a)(2)]
    - i) The total surface area of the top screen of the existing screening operation being replaced and [40 CFR 60.676(a)(2)(i)]
    - ii) The total surface area of the top screen of the replacement screening operation. [40 CFR 60.676(a)(2)(ii)]
  - 3) For a conveyor belt: [40 CFR 60.676(a)(3)]
    - i) The width of the existing belt being replaced and [40 CFR 60.676(a)(3)(i)]
    - ii) The width of the replacement conveyor belt. [40 CFR 60.676(a)(3)(ii)]
  - 4) For a storage bin: [40 CFR 60.676(a)(4)]
    - i) The rated capacity in tons of the existing storage bin being replaced and [40 CFR 60.676(a)(4)(i)]
    - ii) The rated capacity in tons of the replacement storage bins. [40 CFR 60.676(a)(4)(ii)]
- c. The owner or operator of any wet material processing operation that processes saturated and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change to the Administrator. At the time of such change,

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

this screening operation, bucket elevator, or belt conveyor becomes subject to the applicable opacity limit in 40 CFR 60.672(b) and the emission test requirements of 40 CFR 60.11. [40 CFR 60.676(g)]

- d. For performance tests involving only U.S. EPA Reference Method 9 testing, the owner or operator may reduce the 30-day advance notification of performance test in 40 CFR 60.7(a)(6) and 60.8(d) to a 7-day advance notification. [40 CFR 60.675(g)]
- e. The semi-annual report shall contain, as a minimum, a summary of the following information: [401 KAR 52:020, Section 10]
  - 1) Monthly monitoring performed.
  - 2) Deviations from permit requirements as described in **Section F**.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Emission Group 15: EN01 – Kiln Pony Motor Engines

EP	Name	Capacity (Gal/hr)	Construction Date	Control Device
24 01	Kiln Engine 1 Pony Motor New Holland, Model F4HFE413D*A008 (Diesel Fired, 119 hp)	6.08	1/1/2015	None
24 02	Kiln Engine 2 Pony Motor New Holland, Model F4HFE413D*A008 (Diesel Fired, 119 hp)	6.08		
24 03	Kiln Engine 3 Pony Motor New Holland, Model F4HFE413D*A008 (Diesel Fired, 119 hp)	6.08		
24 04	Kiln Engine 4 Pony Motor New Holland, Model F4HFE413D*A008 (Diesel Fired, 119 hp)	6.08		

### APPLICABLE REGULATIONS:

**401 KAR 60:005, Section 2(2)(dddd) 40 C.F.R. 60.4200 through 60.4219, Tables 1 through 8 (Subpart IIII), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.**

**401 KAR 63:002 Section 2(4)(eeee) 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (Subpart ZZZZ), National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.**

### 1. Operating Limitations:

- a. Beginning October 1, 2010, the permittee must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 CFR 60.4207(b)]
- b. For engines that must comply with the emissions standards specified in 40 CFR 60, Subpart IIII, the permittee must do all of the following, except as permitted under 40 CFR 60.4211(g). [40 CFR 60.4211(a)]
  - 1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [40 CFR 60.4211(a)(1)]
  - 2) Change only those emission-related settings that are permitted by the manufacturer; and [40 CFR 60.4211(a)(2)]
  - 3) Meet the requirements of 40 CFR part 1068, as they apply. [40 CFR 60.4211(a)(3)]
- c. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must: [40 CFR 60.4211(g)]



## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 1) 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. [40 CFR 60.4211(g)(2)]
  - 2) Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. [40 CFR 60.4211(g)(2)]
- d. If the stationary CI internal combustion engine is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the permittee when the high backpressure limit of the engine is approached. [40 CFR 60.4209(b)]

### **2. Emission Limitations:**

- a. The permittee shall comply with the emission standards for new nonroad CI engines in 40 CFR 60.4201, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. [40 CFR 60.4204(b)]

#### **Compliance Demonstration Method:**

The permittee must demonstrate compliance by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b), for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g). [40 CFR 60.4211(c)]

- b. The permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 over the entire life of the engine. [40 CFR 60.4206]

### **3. Testing Requirements:**

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

### **4. Specific Monitoring Requirements:**

If permittee's stationary CI ICE equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the permittee when the high backpressure limit of the engine is approached. [40 CFR 60.4209(b)]

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**5. Specific Recordkeeping Requirements:**

If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the permittee must keep records of any corrective action taken after the backpressure monitor has notified the permittee that the high backpressure limit of the engine is approached. [40 CFR 60.4214(c)]

**6. Specific Reporting Requirements:**

Refer to **Section F**

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Emission Group 17: EN03 – Stationary Emergency-Use Engines (NSPS Applicable)**

<b>EP</b>	<b>Name</b>	<b>Capacity (Gal/hr)</b>	<b>Construction Date</b>	<b>Control Device</b>
24 07	Mine Escape Shaft Emergency Generator Caterpillar Model C9 Acert-300 kW (Ultra Low Sulfur Diesel Fired) (444 bhp)	22.686	2/1/2017	None

### **APPLICABLE REGULATIONS:**

**401 KAR 60:005, Section 2(2)(dddd) 40 C.F.R. 60.4200 through 60.4219, Tables 1 through 8 (Subpart III), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.**

**401 KAR 63:002 Section 2(4)(eeee) 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (Subpart ZZZZ), National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.**

### **1. Operating Limitations:**

- a. For engines that must comply with the emissions standards specified in 40 CFR 60, Subpart III, the permittee must do all of the following, except as permitted under 40 CFR 60.4211(g). [40 CFR 60.4211(a)]
  - 1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [40 CFR 60.4211(a)(1)]
  - 2) Change only those emission-related settings that are permitted by the manufacturer; and [40 CFR 60.4211(a)(2)]
  - 3) Meet the requirements of 40 CFR part 1068, as they apply. [40 CFR 60.4211(a)(3)]
- b. Beginning October 1, 2010, the permittee must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 CFR 60.4207(b)]

### **Compliance Demonstration Method:**

- 1) Refer to **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements**.
- 2) The permittee will comply with fuel requirements by purchasing fuel that meets the specified standards.
- c. The permittee must operate the emergency stationary ICE according to the requirements in 40 CFR 60.4211(f)(1) through (3), below. In order for the engine to be considered an emergency stationary ICE under 40 CFR 60, Subpart III, any operation other than emergency operation, maintenance and testing and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.4211(f)(1) through (3), below, is prohibited. If the permittee does not operate the engine according to the requirements in 40

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

CFR 60.4211(f)(1) through (3), below, the engine will not be considered an emergency engine under 40 CFR 60, Subpart IIII and must meet all requirements for non-emergency engines. [40 CFR 4211(f)]

- 1) There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR 60.4211(f)(1)]
- 2) The permittee may operate the emergency stationary ICE for any combination of the purposes specified in 40 CFR 60.4211(f)(2)(i), below, for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4211(f)(2)(3), below, counts as part of the 100 hours per calendar year allowed by 40 CFR 60.4211(f)(2).
  - i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [40 CFR 60.4211(f)(2)(i)]
- 3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4211(f)(2) of this section. Except as provided in 40 CFR 60.4211(f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4211(f)(3)]
  - i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [40 CFR 60.4211(f)(3)(i)]
    - a) The engine is dispatched by the local balancing authority or local transmission and distribution system operator; [40 CFR 60.4211(f)(3)(i)(A)]
    - b) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [40 CFR 60.4211(f)(3)(i)(B)]
    - c) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [40 CFR 60.4211(f)(3)(i)(C)]
    - d) The power is provided only to the facility itself or to support the local transmission and distribution system. [40 CFR 60.4211(f)(3)(i)(D)]
    - e) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

operator may keep these records on behalf of the engine owner or operator. [40 CFR 60.4211(f)(3)(i)(E)]

**2. Emission Limitations:**

- a. For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new non-road CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007. [40 CFR 60.4202(a)(2); 40 CFR 60.4205(b)]
- b. The permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. [40 CFR 60.4206]
- c. The permittee meets the requirements of 40 CFR 63, Subpart ZZZZ, by meeting the requirements of 40 CFR 60, Subpart IIII. [40 CFR 63.6590(c)(6)]

**Compliance Demonstration Method:**

The permittee must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g). [40 CFR 60.4211(c)]

**3. Testing Requirements:**

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

**4. Specific Monitoring Requirements:**

The permittee must install a non-resettable hour meter on each emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines prior to startup of the engine. [40 CFR 60.4209(a)]

**5. Specific Recordkeeping Requirements:**

- a. For emergency engines that does not meet the standards applicable to non-emergency engines in the applicable model year, the permittee must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]
- b. The permittee shall keep documentation from the manufacturer that the engines are certified to meet the emission standards as required in 40 CFR 60.4202(a)(2).

**6. Specific Reporting Requirements:**

Refer to **Section F**

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Emission Group 16: EN02 – Stationary Emergency-Use Engines**

<b>EP</b>	<b>Name</b>	<b>Capacity (Gal/hr)</b>	<b>Construction Date</b>	<b>Control Device</b>
24 06	Mine Emergency Hoist Engine Ford 300G Model 4027610 (170 hp) (Gasoline Fired)	8.686	1/1/1976	None

### **APPLICABLE REGULATIONS:**

**401 KAR 63:002 Section 2(4)(eeee) 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (Subpart ZZZZ), National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.**

#### **1. Operating Limitations:**

- a. The permittee must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640(f)(1) through (3), as written below. In order for the engine to be considered an emergency stationary RICE under 40 CFR 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in nonemergency situations for 50 hours per year, as described below, is prohibited. If the engine is not operated according to the requirements below, the engine will not be considered an emergency engine under 40 CFR 63, Subpart ZZZZ and must meet all requirements for non-emergency engines. [40 CFR 63.6640(f)]
  - 1) There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]
  - 2) The permittee may operate the emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by 40 CFR 63.6640(f)(2). [40 CFR 63.6640(f)(2)]
    - i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. [40 CFR 63.6640(f)(2)(i)]
  - 3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 63.6640 (f)(2). The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)(3)]
- 4) Emergency stationary RICE located at area sources of HAP (when applicable) may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)(4)]
- i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [40 CFR 63.6640(f)(4)(ii)]
- a) The engine is dispatched by the local balancing authority or local transmission and distribution system operator. [40 CFR 63.6640(f)(4)(ii)(A)]
- b) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [40 CFR 63.6640(f)(4)(ii)(B)]
- c) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [40 CFR 63.6640(f)(4)(ii)(C)]
- d) The power is provided only to the facility itself or to support the local transmission and distribution system. [40 CFR 63.6640(f)(4)(ii)(D)]
- e) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. [40 CFR 63.6640(f)(4)(ii)(E)]
- b. The permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a custom maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e)]
- c. The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 2c to 40 CFR 63, Subpart ZZZZ apply. [40 CFR 63.6625(h)]
- d. The permittee shall comply with the operating limitations in Table 2c to 40 CFR 63, Subpart ZZZZ which apply. [40 CFR 63.6602]
- 1) Change oil and filter every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first. [Table 2c to 40 CFR 63, Subpart ZZZZ, Item 6, paragraph a.]

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 2) Inspect spark plugs every 1,000 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary. [Table 2c to 40 CFR 63, Subpart ZZZZ, Item 6, paragraph b.]
  - 3) Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary. [Table 2c to 40 CFR 63, Subpart ZZZZ, Item 6, paragraph c.]
- e. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of 40 CFR 63, Subpart ZZZZ, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, state or local law under which the risk was deemed unacceptable. [Footnote 1 in Table 2c to 40 CFR 63, Subpart ZZZZ]

**2. Emission Limitations:**

Not Applicable

**3. Testing Requirements:**

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

**4. Specific Monitoring Requirements:**

The permittee must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

**5. Specific Record Keeping Requirements:**

- a. The permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. [40 CFR 63.6655(f)]
- b. The permittee shall keep records of maintenance conducted on the stationary RICE in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the maintenance plan. [40 CFR 63.6655(e)]

**6. Specific Reporting Requirements:**

- a. If the permittee has an emergency engine that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), the permittee must submit an annual report according to the requirements in 40 CFR 63.6650(h). [40 CFR 63.6650(h)]
- b. Refer to **Section F**



## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Emission Group 4: LS04 – Kiln Limestone Feed System

EP*	Name	Capacity (tons/hr)	Construction Date
01 08	Conveyor (LS-6) & Transfer (BC-52-006) (30" x 550') [To Conveyor (LS-7 or LS-6A)]	825	1/1/1976
01 09	Conveyor (LS-6A) & Transfer (BC-52-009) (30" x 210') [To Re-Screen (52-020)]	825	
01 10	Screen (8" x 20' Single Deck) Re-Screen 52-020 & Transfer [To Conveyor (LS-7 or LSF-1)]	850	
01 11	Conveyor (LS-7) & Transfer (BC-52-007) (30" x 725') [To Conveyor (LS-9 or LS-8) or #2 Preheater (82-002)]	825	
01 13	Conveyor (LS-8) & Transfer (BC-52-007) (36" x 140') [To #1 Preheater (81-001) or #3 Preheater (83-003)]	825	
02 02	Conveyor (LS-9) & Transfer (BC-52-010) (30" x 200') [To Kiln 4]	825	1/1/1997
02 03	Kiln 4 Surge Bin Transfer [To Conveyor (LS-10)]	825	
02 04	Conveyor (LS-10) & Transfer (BC-52-011) (30" x 100') [To #4 Preheater (84-004)]	660	

**\*Controlled by Dust Suppression**

### APPLICABLE REGULATIONS:

#### **401 KAR 63:010, Fugitive Emissions**

##### **1. Operating Limitations:**

- a. Prior to the installation and start-up of the Dry Sorbent Injection (DSI) systems DSI-01, DSI-2, DSI-03, and DSI-04 associated with Rotary Kilns #1 – #4, **EP 01 08 – EP 01 11, EP 01 13, and EP 02 02 – EP 02 04**, must be operated in accordance with the requirements of **Section H, Alternate Operating Scenario for Emission Group 4**. [401 KAR 52:020, Section 10]
  - 1) Upon installation and start-up of DSI-01, DSI-02, DSI-03, and DSI-04 or prior to July 16, 2027, whichever is earlier, the requirements of **Section H, Alternate Operating Scenario For Emission Group 4** will no longer be applicable.
- b. A person shall not cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished; or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Reasonable precautions shall include, as applicable: [401 KAR 63:010, Section 3(1)]
  - 1) Use, if possible, of water or suitable chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land; [401 KAR 63:010, Section 3(1)(a)]
  - 2) Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts; [401 KAR 63:010, Section 3(1)(b)]

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 3) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations. [401 KAR 63:010, Section 3(1)(c)]
  - 4) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne; [401 KAR 63:010, Section 3(1)(d)]
  - 5) The maintenance of paved roadways in a clean condition; [401 KAR 63:010, Section 3(1)(e)] or
  - 6) The prompt removal of earth or other material from a paved street to which earth or other material has been transported by trucking or earth moving equipment or erosion by water. [401 KAR 63:010, Section 3(1)(f)]
- c. If dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may, based on the cause, type, or amount of a fugitive emission, order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or air-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air. [401 KAR 63:010, Section 3(3)]
- d. At all times while in motion, open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered. [401 KAR 63:010, Section 4(1)]
- e. A person shall not cause, suffer, or allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. [401 KAR 63:010, Section 4(3)]

**2. Emission Limitations:**

A person shall not cause, suffer, or allow visible fugitive dust emissions beyond the lot line of the property on which the emissions originate, as determined by U.S. EPA Reference Method 22 of Appendix A in 40 C.F.R. Part 60, for: [401 KAR 63:010, Section 3(2)]

- a. More than five (5) minutes of emission time during any sixty (60) minute observation period; or [401 KAR 63:010, Section 3(2)(a)]
- b. More than twenty (20) minutes of emission time during any twenty-four (24) hour period. [401 KAR 63:010, Section 3(2)(b)]

**3. Testing Requirements:**

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 4]

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **4. Specific Monitoring Requirements:**

- a. The permittee shall monitor the reasonable precautions taken to prevent particulate matter from becoming airborne on a daily basis. [401 KAR 52:020, Section 10]
- b. If fugitive dust emissions beyond the lot line of the property are observed, the permittee shall conduct U.S. EPA Reference Method 22 (visual determination of fugitive emissions) observations per Appendix A of 40 C.F.R. Part 60. In lieu of conducting U.S. EPA Reference Method 22, the permittee shall immediately perform a corrective action which results in no visible fugitive dust emissions beyond the lot line of the property. [401 KAR 52:020, Section 10]

### **5. Specific Recordkeeping Requirements:**

- a. The permittee shall maintain a log of the reasonable precautions taken to prevent particulate matter from becoming airborne, on a daily basis. Notation of the operating status, down-time, or relevant weather conditions are acceptable for entry to the log. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain a log of the following: [401 KAR 52:020, Section 10]
  - 1) Any U.S. EPA Reference Method 22 performed, and field records identified in U.S. EPA Reference Method 22.
  - 2) Any corrective action taken and the results.

### **6. Specific Reporting Requirements:**

Refer to **Section F**

### **7. Specific Control Equipment Operating Conditions:**

Not applicable.

### **8. Alternate Operating Scenarios:**

Refer to **Section H, Alternate Operating Scenario for Emission Group 4** for requirements that apply to **EP 01 08 – EP 01 11, EP 01 13, and EP 02 02 – EP 02 04** prior to the installation and start-up of the Dry Sorbent Injection (DSI) systems DSI-01, DSI-02, DSI-03, and DSI-04 associated with Rotary Lime Kiln #1 – #4 (**EP 06 01 – EP 06 03, and EP 07 01**).

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Emission Group 1: LS01 – Mine to Stockpile Transfers

EP*	Name	Capacity (tons/hr)	Construction Date
01 01	Conveyor (LS-2) (BC-14-002) (42" x 3025') & Transfer [To ROM Limestone Stockpile]	1050	1/1/1995
02 01	Conveyor (LS-1) (BC-14-001) (42" x 3025') [To Conveyor (LS-2)]	1050	

### Emission Group 2: LS02 – Limestone Stockpiles

EP*	Name	Capacity (Acre-Years /hr)	Construction Date
01 02	Stockpile (8 x 0) (Limestone ROM)	1.56E-04	1/1/1976
01 07	Stockpile (2 1/2 x 1/2) (Kiln Feed)	4.05E-04	
01 17	Stockpile (Limestone Rescreen) LS02 - Limestone Stockpiles	1.4E-04	
01 20	Stockpile (1/2 x 0) (ROM Fines)	5.04E-04	
01 24	Stockpile (Oversized Limestone)	2.63E-05	
01 29	Stockpile (8's) LS02 - Limestone Stockpiles	4.3E-04	
01 33	Stockpile (Sinter Area)	3.87E-04	
01 42	Stockpile (57's)	5.71E-04	4/3/2020
17 03	Stockpile (Limestone Fines Overflow #1) (Adjacent to ROM Pile)	6.74E-05	1/1/2004
17 05	Stockpile (Limestone Fines Overflow #2) (1/2 x 1/8) (Adjacent to Admin Bldg)	4.02E-04	
17 08	Stockpile (Limestone Fines Overflow #3) (Adjacent to Gate Entrance)	2.38E-04	

### Emission Group 3: LS03 – Limestone Screening and Crushing

EP*	Name	Capacity (tons/hr)	Construction Date
01 03	Conveyor (LS-3) & Transfer (BC-51-003) (48" x 555') [To Screens (51-021 & 51-022)]	2100	1/1/1976
01 04	Screening and Crushing Building Operations (8' x 20' Double Deck) & Transfer [To Conveyor (LS-F)]	1120	
01 05	Secondary Crusher (4 1/4 Standard Cone) & Transfer [To Conveyor (LS-4)]	350	
01 06	Conveyor (LS-4) & Transfer (BC-51-004) (36" x 265') [To Conveyor (LS-3)]	1120	
17 07	Conveyor (LS-5T) & Transfer (TC-51-005) [To Kiln Feed Stockpile]	825	1/1/2004
20 03	Loadout (Feed Material) & Transfer Via Front End Loader [To Loader Hopper (51-012)]	625	1/1/2008

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Emission Group 5: LS05 – Limestone Loadout Operations

EP*	Name	Capacity (tons/hr)	Construction Date
01 18	Truck Loadout (Rescreen) Via Front End Loader [From Limestone Re-Screen Stockpile]	100	1/1/1995
01 43	Limestone Loadout Via Front-End Loaders [To Trucks from 57's Stockpile]	550	4/3/2020
01 45	Limestone Transfer Via Front End Loader [To Receiving Hopper #1a and Conveyor (F-1a)]	625	2/4/2021
01 46	Limestone Transfer Via Front End Loader [To Receiving Hopper #2a and Conveyor (F-1)]	625	
01 47	Conveyor and Transfer Point (F-1a) [To Conveyor (F-1)]	625	
03 05	Receiving Hopper #1 (Reclaim) Limestone Transfer Via Front End Loader [To Hopper #1 (51-301) and Conveyor (F-1)]	625	1/1/1976
03 06	Receiving Hopper #2 (Reclaim) Limestone Transfer Via Front End Loader [To Hopper #2 (51-302) and Conveyor (F-1)]	625	
03 07	Conveyor (F-1) & Transfer (BC-51-101) (30" x 90') [To Conveyor (F-2)]	625	
03 08	Receiving Hopper #3 (Reclaim) Limestone Transfer Via Front End Loader [To Hopper #3 (51-303) and Conveyor (F-2)]	625	
03 09	Conveyor (F-2) & Transfer (BC-51-102) (30" x 675') [To Conveyor (F-3)]	625	
03 10	Conveyor (F-3) & Transfer (BC-51-103) (30" x 720') [To Barge Loadout]	625	

### Emission Group 6: LS06 – Sinter Operation

EP*	Name	Capacity (tons/hr)	Construction Date
01 16	Conveyor (LSF-1) & Transfer (BC-52-004) (24" x 208') [To Limestone Re-Screen Stockpile]	100	1/1/1976
01 25	Limestone Truck Loadout (Oversized) Via Front End Loaders [From Oversized Stockpile to Trucks]	200	
01 27	Conveyor (L) & Transfer (BC-51-202) (24" x 125') [To 8s Stacker (51-203)]	250	
01 28	Conveyor (H-2) (8's Stacker) & Transfer (51-203) (24" x 200") [To 8s Stockpile]	250	
01 30	Limestone Truck Loadout (8's) Via Front End Loaders [From 8's Stockpile to Truck]	250	
01 31	Conveyor (F) & Transfer (BC-51-206) (24" x 100') [To Sinter Stacker (51-207)]	250	
01 32	Conveyor (H-1) (Sinter Stacker) & Transfer (51-207) (24" x 200') [To Sinter Stockpile or Sand Stockpile]	250	

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP*	Name	Capacity (tons/hr)	Construction Date
01 34	Limestone Truck Loadout (Sinter) Via Front End Loaders [From Sinter Stockpile to Truck]	250	1/1/1976
01 37	Transfer Via Front End Loader [To ROM Fines Hopper (51-300)]	250	
01 38	Belt Feeder (F-8) & Transfer (BC-51-211) [To Conveyor (F-7)] LS06 - Sinter Operation	250	1/1/2013
01 39	Conveyor (F-7) & Transfer (BC-51-210) [To Feed Conveyor (C-003)]	250	

### Emission Group 11: LM02 – Lime System Buildings

EP*	Name	Capacity (tons/hr)	Construction Date
23 01	Burner Building (Kiln Discharge)	196	1/1/1976
23 02	Reject Lime Receiving Building	50	7/1/2013
23 03	Reject Lime Reclaim Building	50	
23 04	Fairfield Lime Screening Building	1140	1/1/1976

### Emission Group 12: LM03 – Reject Lime Stockpiles

EP*	Name	Capacity (Acre-Years /hr)	Construction Date
25 01	Reject Lime Stockpile#1 (Near LKD Bin)	1.16E-06	1/1/1976
25 02	Reject Lime Stockpile #2 (Near Lime Silos)	1.16E-06	
25 03	Reject Lime Stockpile #3 (Near Pebble Bin)	1.16E-06	
25 04	Reject Lime Stockpile #4 (Near Reject Lime Bin)	1.16E-06	

### Emission Group 13: LM04 – Lime Loadout

EP*	Name	Capacity (tons/hr)	Construction Date
08 02	Self-Contained Compact Filter or Kiln Dust Bin Loading Hopper and Truck Loadout (BF-63-020)	25	1/1/2008
08 05	Truck Loadout Lime Kiln Dust Bin	25	1/1/1976
08 06	Transloading Operation Loading Spout (Portable)	300	11/7/2022
14 07	Barge Loadout (L-6A)	1140	1/1/1976
14 16	Lime Truck Loadout Station	260	
14 17	Lime Railcar Loadout Station	260	
14 18	Milled Lime Truck & Railcar Loadout Station	100	7/31/2023

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Emission Group 14: RD01 – Road and Landfills Operations

EP*	Name	Capacity (tons/hr)	Construction Date
15 01	Haul Road & Yard Area (Paved - 1.3 miles)	N/A	1/1/1976
15 02	Haul Road & Yard Area (Unpaved - 0.5 miles)	N/A	
16 01	Landfill Operations	175	1/1/1995

### Emission Group 18: LS07 – 57's Operation

EP*	Name	Capacity (tons/hr)	Construction Date
01 19	Conveyor (LSF) & Transfer (BC-51-001) (24" x 375') [To Sinter Area Surge Pile]	700	1/1/1995
01 21	Conveyor (F-6) & Transfer (BC-51-200) (24" x 150') [To Conveyor (C-003)]	550	1/1/1976
01 23	Screen (8" x 16' Triple Deck) Wash Plant (S-001) (51-221) & Transfer [To Overstock Stockpile, 57s Conveyor, Conveyor (L) or Screen (51-225)]	550	1/1/1976
01 40	Conveyor & Transfer (57's Belt ) [To 57's Stacker]	550	4/3/2020
01 41	Stacker & Transfer (57's) [To 57's Stockpile]	550	
01 44	Screen (Double Deck) (51-225) & Transfer [To Conveyor (F) or Mine Disposal Area]	550	
18 02	Feed Conveyor (C-003) & Transfer (BC-51-201) [To Screen (S-001)]	550	1/1/2004

\*Controlled by Dust Suppression

### APPLICABLE REGULATIONS:

#### 401 KAR 63:010, Fugitive Emissions

##### 1. Operating Limitations:

- a. A person shall not cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished; or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Reasonable precautions shall include, as applicable: [401 KAR 63:010, Section 3(1)]
  - 1) Use, if possible, of water or suitable chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land; [401 KAR 63:010, Section 3(1)(a)]
  - 2) Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts; [401 KAR 63:010, Section 3(1)(b)]
  - 3) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations. [401 KAR 63:010, Section 3(1)(c)]

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 4) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne; [401 KAR 63:010, Section 3(1)(d)]
  - 5) The maintenance of paved roadways in a clean condition; or [401 KAR 63:010, Section 3(1)(e)]
  - 6) The prompt removal of earth or other material from a paved street to which earth or other material has been transported by trucking or earth moving equipment or erosion by water. [401 KAR 63:010, Section 3(1)(f)]
- b. If dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may, based on the cause, type, or amount of a fugitive emission, order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or air-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air. [401 KAR 63:010, Section 3(3)]
  - c. At all times while in motion, open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered. [401 KAR 63:010, Section 4(1)]
  - d. A person shall not cause, suffer, or allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. [401 KAR 63:010, Section 4(3)]

**2. Emission Limitations:**

A person shall not cause, suffer, or allow visible fugitive dust emissions beyond the lot line of the property on which the emissions originate, as determined by U.S. EPA Reference Method 22 of Appendix A in 40 C.F.R. Part 60, for: [401 KAR 63:010, Section 3(2)]

- a. More than five (5) minutes of emission time during any sixty (60) minute observation period; or [401 KAR 63:010, Section 3(2)(a)]
- b. More than twenty (20) minutes of emission time during any twenty-four (24) hour period. [401 KAR 63:010, Section 3(2)(b)]

**3. Testing Requirements:**

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 4]

**4. Specific Monitoring Requirements:**

- a. The permittee shall monitor the reasonable precautions taken to prevent particulate matter from becoming airborne on a daily basis. [401 KAR 52:020, Section 10]
- b. If fugitive dust emissions beyond the lot line of the property are observed, the permittee shall conduct U.S. EPA Reference Method 22 (visual determination of fugitive emissions)



## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

observations per Appendix A of 40 C.F.R. Part 60. In lieu of conducting U.S. EPA Reference Method 22, the permittee shall immediately perform a corrective action which results in no visible fugitive dust emissions beyond the lot line of the property. [401 KAR 52:020, Section 10]

### **5. Specific Recordkeeping Requirements:**

- a. The permittee shall maintain a log of the reasonable precautions taken to prevent particulate matter from becoming airborne, on a daily basis. Notation of the operating status, down-time, or relevant weather conditions are acceptable for entry to the log. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain a log of the following: [401 KAR 52:020, Section 10]
  - 1) Any U.S. EPA Reference Method 22 performed, and field records identified in U.S. EPA Reference Method 22.
  - 2) Any corrective action taken and the results.

### **6. Specific Reporting Requirements:**

Refer to **Section F**

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Emission Group 19: Lime Transloading Operation

EP	Name	Capacity	Construction Date	Control Method
08 07	Transloading Operation Dust Collection System (Portable)	300 tons/hr	11/7/2022	Dust Collection System
08 08	Diesel Engine 50 HP*	2.56 gals/hr	11/7/2022	None

\*Power supply to transloading operation EP 08 06 and EP 08 07

### APPLICABLE REGULATIONS:

**401 KAR 59:010, New process operations**

### STATE-ORIGIN REQUIREMENT

**401 KAR 63:020, Potentially hazardous matter or toxic substances** (Applies to EP 08 08)

There are no additional applicable requirements to EP 08 08 other than the general applicable requirements if the unit is defined as a *nonroad engine*.

Pursuant to 40 CFR 1068.30, a *nonroad engine* is defined by the following:

1. An internal combustion engine that by itself or in or on a piece of equipment, it is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another; or
2. The internal combustion engine does not remain at a location for more than 12 consecutive months. A location is any single site at a building, structure, facility, or installation. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform

### **1. Operating Limitations:**

If required, the permittee shall provide documentation that the engine does not remain at a location for more than 12 consecutive months to not be defined as nonroad, thus not applicable to 40 CFR 63, Subpart ZZZZ or 40 CFR 60, Subpart IIII.

### **Compliance Demonstration Method:**

Compliance shall be demonstrated with **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements**

### **2. Emission Limitations:**

- a. For emissions from a control device or stack the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A:

[401 KAR 59:010, Section 3(2)]

- 1) For  $P \leq 0.5$  ton/hr:  $E = 2.34$
- 2) For  $P$  from 0.5 ton/hr to 30 ton/hr:  $E = 3.59P^{0.62}$

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

3) For  $P > 30$  ton/hr:

$$E = 17.31P^{0.16}$$

Where:

E = rate of emission in lb/hr and;

P = process weight rate in tons/hr

- b. No person shall cause, suffer, allow or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]
- c. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

**Compliance Demonstration Method:**

- a. The emission points listed above are assumed to be in compliance with the PM emission limit when the control devices listed above are used in conjunction with the associated emission point and properly maintained. Refer to **4. Specific Monitoring Requirements** and **Section F**).
- b. For compliance with the opacity limitations, refer to **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements**.
- c. The Division determines that the source is in compliance with the 401 KAR 63:020 standard when burning diesel fuel.

**3. Testing Requirements:**

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

**4. Specific Monitoring Requirements:**

- a. Install, calibrate, maintain, and operate a pressure drop monitoring device to continuously monitor the differential pressure across the baghouse to ensure that pressure does not drop outside the pressure drop range documented by the manufacturer's specifications or the pressure drop range determined during the most recent performance test. Personnel will monitor the differential pressure reading across the baghouse at least once per shift during all times of operation. [401 KAR 52:020, Section 10]
- b. The filters on the dust collector shall be inspected for proper operation, condition and maintenance according to the manufacturer's specifications and recommendations. [401 KAR 52:020, Section 10]

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- c. In lieu of a pressure drop monitoring device, the permittee may submit to the Division, an alternate baghouse performance indicator plan. [401 KAR 52:020, Section 10]
  - 1) The performance plan shall identify and describe the parameters to be monitored or methods the owner or operator will use to ensure proper operation of the baghouse, monitoring frequency of the method, specify records to be retained and a plan of action when the baghouse is not operating as outlined by the plan.
  - 2) The plan shall be submitted to the Division prior to startup of the new, reconstructed, or modified affected facility.
  - 3) The plan shall be revised as needed to reflect any changing conditions at the source. Such revisions shall be dated and submitted to the Division before a source can operate pursuant to these revisions.
- d. The permittee shall perform a qualitative visual observation of the opacity of emissions from the outlet of the control device no less frequently than monthly while the affected facility is operating. If visible emissions from the control device are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]
- e. The permittee shall monitor the location and hours of operation of the engine on a monthly basis. [401 KAR 52:020, Section 10]

**5. Specific Recordkeeping Requirements:**

- a. All routine and non-routine maintenance activities performed on the corresponding control device shall be recorded. [401 KAR 52:020, Section 10]
- b. Records of pressure drop readings shall be maintained. [401 KAR 52:020, Section 10]
- c. Records of the dates of filter replacements from the dust collector shall be maintained, and manufacturer's filter specifications shall be made available on site. [401 KAR 52:020, Section 10]
- d. The permittee shall maintain a record of the following for the visual observations required by **4. Specific Monitoring Requirements:** [401 KAR 52:020, Section 10]
  - 1) Result of the monthly visual observations;
  - 2) Date (mm/dd/yyyy) of the observation made;
  - 3) Initials of the observer;
  - 4) Any emissions observed (yes/no);
  - 5) Any U.S. EPA Reference Method 9 readings taken; and
  - 6) Corrective actions (if any) including results due to observed emissions.
- e. The permittee shall maintain monthly records of the location and hours of operation of the engine on site for five (5) years from the date of last entry and shall be made available, upon request, for inspection by the Cabinet. [401 KAR 52:020, Section 10]

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**6. Specific Reporting Requirements:**

Refer to **Section F**

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Emission Group 20: DS01 – Dry Sorbent Injection (DSI) System

EP	Name	Capacity (tons/hr)	Construction Date	Control Method
30 01	Transfer Point (Kiln #1 Dry Sorbent Bag to DSI Hopper)	0.12	Proposed 2/7/2025	Integral Vent Filter
30 02	Transfer Point (Kiln #1 DSI Hopper to DSI Screw Conveyor)			
30 03	Transfer Point (Kiln #1 DSI Screw Conveyor to DSI Injection Line)			
30 04	Transfer Point (Kiln #2 Dry Sorbent Bag to DSI Hopper)			
30 05	Transfer Point (Kiln #2 DSI Hopper to DSI Screw Conveyor)			
30 06	Transfer Point (Kiln #2 DSI Screw Conveyor to DSI Injection Line)			
30 07	Transfer Point (Kiln #3 Dry Sorbent Bag to DSI Hopper)			
30 08	Transfer Point (Kiln #3 DSI Hopper to DSI Screw Conveyor)			
30 09	Transfer Point (Kiln #3 DSI Screw Conveyor to DSI Injection Line)			
30 10	Transfer Point (Kiln #4 Dry Sorbent Bag to DSI Hopper)			
30 11	Transfer Point (Kiln #4 DSI Hopper to DSI Screw Conveyor)			
30 12	Transfer Point (Kiln #4 DSI Screw Conveyor to DSI Injection Line)			

### APPLICABLE REGULATIONS:

#### 401 KAR 59:010, New process operations

#### 1. Operating Limitations:

None

#### 2. Emission Limitations:

- a. For emissions from a control device or stack the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A:

[401 KAR 59:010, Section 3(2)]

- 1) For  $P \leq 0.5$  ton/hr:  $E = 2.34$
- 2) For  $P$  from 0.5 ton/hr to 30 ton/hr:  $E = 3.59P^{0.62}$
- 3) For  $P > 30$  ton/hr:  $E = 17.31P^{0.16}$

Where:

$E$  = rate of emission in lb/hr and;

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

P = process weight rate in tons/hr

- b. No person shall cause, suffer, allow or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]

### **Compliance Demonstration Method:**

- a. The emission points listed above are assumed to be in compliance with the PM emission limit when the control devices listed above are used in conjunction with the associated emission point and properly maintained. Refer to **4. Specific Monitoring Requirements** and **Section F**).
- b. For compliance with the opacity limitations, refer to **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements**.

### **3. Testing Requirements:**

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

### **4. Specific Monitoring Requirements:**

- a. The filters on the vent filter shall be inspected for proper operation, condition and maintenance according to the manufacturer's specifications and recommendations. [401 KAR 52:020, Section 10]
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the outlet of the control device no less frequently than monthly while the affected facility is operating. If visible emissions from the control device are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]
- c. The permittee must monitor the Dry Sorbent Injection System to ensure sufficient dry sorbent injection is occurring at all times during normal kiln operation. [401 KAR 52:020, Section 10]

### **5. Specific Recordkeeping Requirements:**

- a. All routine and non-routine maintenance activities performed on the corresponding control device shall be recorded. [401 KAR 52:020, Section 10]
- b. Records of dry sorbent injection system operation shall be maintained. [401 KAR 52:020, Section 10]

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- c. Records of the dates of filter replacements from the vent filter shall be maintained, and manufacturer's filter specifications shall be made available on site. [401 KAR 52:020, Section 10]
- d. The permittee shall maintain a record of the following for the visual observations required by **4. Specific Monitoring Requirements**: [401 KAR 52:020, Section 10]
  - 1) Result of the monthly visual observations;
  - 2) Date (mm/dd/yyyy) of the observation made;
  - 3) Initials of the observer;
  - 4) Any emissions observed (yes/no);
  - 5) Any U.S. EPA Reference Method 9 readings taken; and
  - 6) Corrective actions (if any) including results due to observed emissions.

**6. Specific Reporting Requirements:**

Refer to **Section F**



**SECTION C – INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. Biodiesel Tank- 10,000 gal (Behind Mine Dry Building)	None
2. AW68 Hydraulic Oil Tank- 10,000 gal (Behind Mine Dry Building)	None
3. 15W40 Oil Tank- 5,000 gal (Behind Mine Dry Building)	None
4. Purinox Tank- 5,000 gal (Behind Mine Dry Building)	None
5. Diesel Fuel Tank- 660 gal (Mine Shaft Emergency Generator EP 24 07)	None
6. Gasoline Tank- 3,000 gal (Plant Oil Storage Area)	None
7. Diesel Oil Tank- 15,000 gal (Plant Oil Storage Area)	None
8. Used Oil Tank- 15,000 gal (Plant Oil Storage Area)	None
9. 15W40 Oil Tank- 3,000 gal (Shop Oil Storage Area)	None
10. AW68 Hydraulic Oil Tank- 3,000 gal (Shop Oil Storage Area)	None
11. Transmission and Drive Oil Tank- 275 gal	None
12. Ultra-Low Sulfur Diesel Tank- 500 gal	None
13. Transmission Oil Tank- 275 gal	None
14. Diesel Tank- 15,000 gal (Kiln Storage Area)	None
15. Gasoline Tank- 580 gal (Kiln Storage Area)	None
16. Preheater Oil Tank- 4,000 gal (Kiln Storage Area)	None
17. Kerosene Tank- 500 gal (Kiln Storage Area)	None
18. Ethylene Glycol Storage Tank- 6,000 gal (For Kilns 1, 2, 3)	None
19. Ethylene Glycol Storage Tank- 600 gal (For Kiln 4)	None

**SECTION D – SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS**

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Particulate matter (PM/PM<sub>10</sub>/PM<sub>2.5</sub>), carbon monoxide (CO), nitrogen oxide (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), VOC, and hydrogen chloride (HCl) emissions, measured by applicable U.S. EPA Reference Methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
3. **Source Emission Limitations:**
  - a. Upon installation and start-up of the DSI control device at **EP 06 01 – EP 06 03**, and **EP 07 01**, source-wide emissions shall not exceed the following limitations on a twelve (12) consecutive month basis:
    - 1) Emissions of any single HAP shall not exceed 9.90 tons per twelve (12) consecutive months.
    - 2) Emissions of combined HAPs shall not exceed 24.50 tons per twelve (12) consecutive months.

**Compliance Demonstration Method:**

- 1) Compliance with the emissions limitations listed above in **3. Source Emission Limitations** a., shall be determined by calculating and recording monthly emission rates and rolling twelve (12) month total emissions of individual HAP and combined HAPs from each unit in Section B and Section C.
- 2) If total single HAP emissions exceed 9.0 tons or combined HAPs emissions exceed 22.5 tons during any twelve (12) consecutive month period, the permittee will begin tracking annual single HAP emissions or combined HAPs emissions on a weekly basis beginning the following calendar month. Emissions will be tracked in this manner for a minimum of three (3) consecutive months, and monthly emission reports shall be submitted to the Ashland Regional Office during this time. If the rolling twelve (12) month total remains less than 9.0 tons for all single HAP emissions or 22.5 tons for combined HAP emissions for three (3) consecutive months, the permittee may return to monthly tracking and semi-annual reporting until such time as emissions may again exceed 9.0 tons for any single HAP emissions or 22.5 tons for combined HAPs emissions for a rolling twelve (12) month total.
  - i) Weekly tracking will be accomplished by recalculating each of the applicable month's emissions from the prior year from monthly total to a weekly totals and compared with the weekly totals from the same week of the current year. For the purposes of this tracking, each month shall be broken down into four (4) weeks as follows:

Week 1: Day 1 thru day 7

Week 2: Day 8 thru day 14

Week 3: Day 15 thru day 21

Week 4: Day 22 thru day 31

## **SECTION D – SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)**

- ii) These records shall be maintained on site for a period of five years from the date the data was collected and shall be provided to the Division upon request.

### **4. Source Recordkeeping Requirements:**

The permittee shall retain documentation of single HAP and combined HAPs emissions calculations on site for a minimum of five (5) years. The documentation shall be made available for inspection by the Division or U.S. EPA upon request.

## **SECTION E – SOURCE CONTROL EQUIPMENT REQUIREMENTS**

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

**SECTION F – MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS**

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five (5) years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
3. In accordance with the requirements of 401 KAR 52:020, Section 3(1)h, the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation. [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020, Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported

**SECTION F – MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1, the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken shall be submitted to the Regional Office listed on the front of this permit. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement does not identify a specific time frame for reporting deviations, prompt reporting, as required by Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, shall be defined as follows:
  - a. For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
  - b. For emissions of any regulated air pollutant, excluding those listed in F.8.a., that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
  - c. All deviations from permit requirements, including those previously reported, shall be included in the semiannual report required by F.6.
9. Pursuant to 401 KAR 52:020, Title V permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

**SECTION F – MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

- f. The certification shall be submitted by January 30th of each year. Annual compliance certifications shall be sent to the following addresses:

Division for Air Quality  
Ashland Regional Office  
1550 Wolohan Drive, Suite 1  
Ashland, KY 41102-8942

U.S. EPA Region 4  
Air Enforcement Branch  
Atlanta Federal Center  
61 Forsyth St. SW  
Atlanta, GA 30303-8960

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within 30 days of the date the Kentucky Emissions Inventory System (KYEIS) emissions survey is mailed to the permittee.

## SECTION G - GENERAL PROVISIONS

### 1. General Compliance Requirements

- a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020, Section 3(1)(b), and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit. [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition. [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - 1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
  - 2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - 3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
  - 4) New requirements become applicable to a source subject to the Acid Rain Program.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit. [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020, Section 3(1)(c)].



**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority. [401 KAR 52:020, Section 7(1)]
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements. [Section 1a-15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6). [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:020, Section 11(3) b]
- l. This permit does not convey property rights or exclusive privileges. [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 52:020, Section 11(3) d.]
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 52:020, Section 11(3) a.]
- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

incorporates all requirements of those existing permits into one single permit for this source.

- q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
  - 1) Applicable requirements that are included and specifically identified in this permit; and
  - 2) Non-applicable requirements expressly identified in this permit.

**2. Permit Expiration and Reapplication Requirements**

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least (6) six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:020, Section 12]
- b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets. [401 KAR 52:020, Section 8(2)]

**3. Permit Revisions**

- a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan (SIP) or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and 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 permitting authority within ten (10) days following the transfer.

**4. Construction, Start-Up, and Initial Compliance Demonstration Requirements**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, **Emission Points 30 01 – 30 12** in accordance with the terms and conditions of this permit V-21-006 R2.

- a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, notification of the following:
  - 1) The date when construction commenced.
  - 2) The date of start-up of the affected facilities listed in this permit.
  - 3) The date when the maximum production rate specified in the permit application was achieved.
- c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- d. Pursuant to 401 KAR 50:055, Section 2(1)(a), an owner or operator of any affected facility subject to any standard within the administrative regulations of the Division for Air Quality shall demonstrate compliance with the applicable standard(s) within sixty (60) days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up of such facility. Pursuant to 401 KAR 52:020, Section 3(3)(c), sources that have not demonstrated compliance within the timeframes prescribed in 401 KAR 50:055, Section 2(1)(a), shall operate the affected facility only for purposes of demonstrating compliance unless authorized under an approved compliance plan or an order of the cabinet.
- e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.
- f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

**5. Testing Requirements:**

- a. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045, Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

**6. Acid Rain Program Requirements**

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NO<sub>x</sub> compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

**7. Emergency Provisions**

- a. Pursuant to 401 KAR 52:020, Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - 1) An emergency occurred and the permittee can identify the cause of the emergency;
  - 2) The permitted facility was at the time being properly operated;
  - 3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - 4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
  - 5) This requirement does not relieve the source of other local, state or federal notification requirements.
- b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement. [401 KAR 52:020, Section 24(3)]

## SECTION G - GENERAL PROVISIONS (CONTINUED)

- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:020, Section 24(2)]

### 8. Ozone Depleting Substances

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - 1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - 2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - 3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - 4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.155.
  - 5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156 and 40 CFR 82.157.
  - 6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

### 9. Risk Management Provisions

- a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to U.S. EPA using the RMP\* eSubmit software.
- b. If requested, submit additional relevant information to the Division or the U.S. EPA.

**SECTION H - ALTERNATE OPERATING SCENARIOS**

The alternate operating scenario set forth below have been approved by the Division based on information supplied with the application and during the application review process. The terms and conditions of each alternate operating scenario have been developed to ensure compliance with the applicable regulations. The permittee, when making a change from one operating scenario to another, shall record contemporaneously in a log at the permitted facility a record of the scenario under which the facility is operating. The permit shield, as provided in Section G shall extend to each alternate operating scenario set forth in this Section. All conditions not specified under an alternate operating scenario shall remain unchanged from their permit values or requirements.

**ALTERNATE OPERATING SCENARIO FOR EMISSION GROUP 9 – ROTARY LIME KILN #4****Emission Group 9: KL04 – Rotary Kilns**

EP	Name	Capacity (tons/hr)	Construction Date	Control Device
07 01	Rotary Lime Kiln #4 Fuller Kiln – 16' × 210' Primary Fuel: Pulverized Coal, Startup Fuel: Diesel Oil	46	7/8/1997	Pulse-Jet Baghouse Amerex Industries, Model: 7 Module Rex Pulse RP-14 304 D6 (16 × 19);

**APPLICABLE REGULATIONS:**

**401 KAR 51:017, Prevention of Significant Deterioration of Air Quality**

**401 KAR 59:010, New Process Operations**

**401 KAR 60:005, Section 2(2)(qq) 40 C.F.R. 60.340 through 60.344 (Subpart HH), Standards of Performance for Lime Manufacturing Plants**

**401 KAR 63:002, Section 2(2)(ffff) 40 C.F.R. 63.7080 through 63.7143, Tables 1 through 8 (Subpart AAAAA), National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants**

**40 CFR 64, Compliance Assurance Monitoring (CAM)**

**1. Operating Limitations:**

- a. Lime production from Rotary Kiln #4 shall not exceed 46 tons per hour. [401 KAR 51:017]

**Compliance Demonstration Method:**

Compliance shall be demonstrated through **4. Specific Monitoring Requirements** g.

- b. The only solid fuel permissible in the kiln is coal. [401 KAR 51:017]
- 1) Coal with less than an average heating value of 12,900 Btu/lb or the average for the coal burned during a prior passing compliance demonstration for the nitrogen oxide (NO<sub>x</sub>), carbon monoxide (CO), particulate matter (PM), and sulfur dioxide (SO<sub>2</sub>) emission limits, whichever is lower, shall not be burned. For the purposes of this

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

condition, average heating value is defined as the weighted average heating value in the coal from all shipments received in each month on a dry weight basis.

- 2) Coal with more than an average sulfur content of either 0.9% or the average for the coal burned during a prior passing compliance demonstration for the NO<sub>x</sub>, CO, PM, and SO<sub>2</sub> emission limits, whichever is higher, shall not be burned. For the purposes of this condition, average sulfur content is defined as the weighted average sulfur content in the coal from all shipments received in each month on a dry weight basis.

**Compliance Demonstration Method:**

In determining compliance with the sulfur content limitation and heating value of the coal, the permittee may obtain certification from the supplier or test one sample of coal as received or shipped in. When the facility combusts coal with an average heating value less than allowed or a sulfur content more than allowed, the facility shall submit a protocol within 30 days of the end of the month the excursion occurs to conduct performance testing to demonstrate compliance with the NO<sub>x</sub>, CO, PM, and SO<sub>2</sub> emission limits.

- c. Maintain and operate the fabric filter baghouse such that the BLDS or PM detector alarm condition does not exist for more than 5 percent of the total operating time in a 6-month period; and comply with the requirements in 40 CFR 63.7113(d) through (f) and table 6 to Subpart AAAAA. In lieu of a BLDS or PM detector, maintain the fabric filter baghouse such that the 6-minute average opacity for any 6-minute block period does not exceed 15 percent; and comply with the requirements in 40 CFR 63.7113(f) and (g) and table 6 to Subpart AAAAA. [40 CFR 63.7090(b); Table 3, Item 1 to 40 CFR 63, Subpart AAAAA]

**Compliance Demonstration Method:**

Demonstrate continuous compliance by maintaining, calibrating and operating a COMS as required by 40 CFR part 63, Subpart A, General Provisions and according to PS-1 of Appendix B to 40 CFR 60, except as specified in 40 CFR 63.7113(g)(2); and collecting the COMS data at a frequency of at least once every 15 seconds, determining block averages for each 6-minute period and demonstrating for each 6-minute block period the average opacity does not exceed 15 percent.

- d. Prepare and implement a written operations, maintenance, and monitoring (OM&M) plan; the plan must include the items listed in 40 CFR 63.7100(d) and the corrective actions to be taken when required in Table 6 to 40 CFR 63, Subpart AAAAA. [40 CFR 63.7090(b); Table 3, Item 5 to 40 CFR 63, Subpart AAAAA]
- e. The emission point must be in compliance with the operating limits of 40 CFR 63, Subpart AAAAA at all times. The permittee may operate outside of the established operating parameter limit(s) during performance tests in order to establish new operating limits. [40 CFR 63.7100(a)]
- f. The permittee must always operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved.

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7100(c)]

**2. Emission Limitations:****a. Particulate Matter Emissions:**

- 1) Emissions of particulate matter shall not exceed 0.12 lb/ton of stone feed (lb/tsf). Weighted average PM emissions may be determined according to Equation 2 in 40 CFR 63.7112(f)(1) and must not exceed 0.12 lb/tsf. [40 CFR 63.7090(a); Table 1 to 40 CFR 63, Subpart AAAAA, Item 1 and 4; 401 KAR 51:017]

**Compliance Demonstration Method:**

Compliance shall be demonstrated through performance testing required under

**3. Testing Requirements c.**

- 2) The permittee shall not exceed 0.597 lb/ton of stone feed (lb/tsf). [40 CFR 60.342]

**Compliance Demonstration Method:**

Compliance shall be demonstrated through **2. Emission Limitations a.1)**

**b. The permittee must comply with the below emission limitations and must have completed all applicable performance tests no later than July 16, 2027: [40 CFR 63.7083(d)]**

- 1) HCl emissions must not exceed 0.52 lb/ton of lime produced. [Table 1 to 40 CFR 63, Subpart AAAAA, Item 8]
- 2) Mercury emissions must not exceed 34 lb/MMton of lime produced. [Table 1 to 40 CFR 63, Subpart AAAAA, Item 14]
- 3) Total Organic HAP emissions must not exceed 2.6 ppmvd at 7% O<sub>2</sub>. [Table 1 to 40 CFR 63, Subpart AAAAA, Item 15]
- 4) Dioxins and furans (D/F) emissions must not exceed 0.037 ng/dscm at 7% O<sub>2</sub>. [Table 1 to 40 CFR 63, Subpart AAAAA, Item 16]

**Compliance Demonstration Method:**

The permittee must demonstrate initial compliance with each emission limit in Table 1 to 40 CFR 63, Subpart AAAAA that applies, according to Table 4 to 40 CFR 63, Subpart AAAAA. The permittee may perform VE measurements in accordance with U.S. EPA Reference Method 9 of appendix A to part 60 in lieu of installing a COMS or PM detector if any of the conditions in 40 CFR 63.7114(a)(1) through (3) exist: [40 CFR 63.7114(a)]

- 1) The permittee uses a FF for PM control, and the FF is under positive pressure and has multiple stacks; or [40 CFR 63.7114(a)(1)]
- 2) The control device exhausts through a monovent; or [40 CFR 63.7114(a)(2)]
- 3) The installation of a COMS in accordance with PS-1 of appendix B to part 60 is infeasible. [40 CFR 63.7114(a)(3)]
- 4) Compliance must be demonstrated by July 16, 2027, unless the permittee demonstrates that they are no longer a major source of HAPs. See **3. Testing Requirements g.** below.



**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- c. Sulfur dioxide emissions shall not exceed 25.097 lb/hr. [401 KAR 51:017]
- d. Nitrogen dioxide emissions shall not exceed 174.80 lb/hr. [401 KAR 51:017]
- e. Carbon monoxide emissions shall not exceed 128.80 lb/hr. [401 KAR 51:017]

**Compliance Demonstration Method:**

- 1) Compliance with the **2. Emission Limitations c., d., and e.** shall be demonstrated through performance testing required under **3. Testing Requirements d. and e.**
- 2) When required for comparison with the particulate matter emission limit, emission rates shall be calculated using the following equation: [40 CFR 60.344]

$$E = (c_s Q_{sd}) / PK$$

Where:

E = emission rate of particulate matter, lb/ton of stone feed

$c_s$  = concentration of particulate matter, g/dscf

$Q_{sd}$  = volumetric flow rate of effluent gas, dscf/hr

P = stone feed rate, ton/hr

K = conversion factor, 7000gr/lb

- 3) U.S. EPA Reference Method 5 shall be used at negative-pressure fabric filters and other types of control devices and U.S. EPA Reference Method 5D shall be used at positive-pressure fabric filters to determine the particulate matter concentration ( $c_s$ ) and the volumetric flow rate ( $Q_{sd}$ ) of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf). [40 CFR 60.344(b)(2)]
- 4) The monitoring device specified in **3. Testing Requirements b.** shall be used to determine the stone feed rate (P) for each run. [40 CFR 60.344(b)(3)]
- f. Visible emissions discharged into the atmosphere shall not exceed 15% opacity when exiting from a dry emission control device. [40 CFR 60.342(a)(2); 401 KAR 59:010 Section 3(1) subsumed; 401 KAR 51:017]

**Compliance Demonstration Method:**

Compliance shall be demonstrated through **4. Specific Monitoring Requirements b.**

- g. During startup of a kiln, visible emissions must not exceed fifteen percent (15%) opacity (based on startup period block average). [40 CFR 63.7090(c) and Table 2, Item 1 to 40 CFR 63, Subpart AAAAA]

**Compliance Demonstration Method:**

Compliance shall be demonstrated through **4. Specific Monitoring Requirements i.**

- h. During shutdown of a kiln, visible emissions must not exceed fifteen percent (15%) opacity (based on 6-minute average opacity for any 6-minute block period). [40 CFR 63.7090(c) and Table 2 to 40 CFR 63, Subpart AAAAA, Item 3]

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)****Compliance Demonstration Method:**

Compliance shall be demonstrated through **4. Specific Monitoring Requirements i.**

- i. For emissions from a control device or stack the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A:

[401 KAR 59:010, Section 3(2)]

- |  |                     |
|--|---------------------|
| 1) For $P \leq 0.5$ ton/hr:              | $E = 2.34$          |
| 2) For $P$ from 0.5 ton/hr to 30 ton/hr: | $E = 3.59P^{0.62}$  |
| 3) For $P > 30$ ton/hr:                  | $E = 17.31P^{0.16}$ |

Where:

$E$  = rate of emission in lb/hr and;

$P$  = process weight rate in tons/hr

**Compliance Demonstration Method:**

The emission points listed above are assumed to be in compliance with the PM emission limit when the control devices listed above are used in conjunction with the associated emission point and properly maintained. Refer to **4. Specific Monitoring Requirements.**

- j. The emission point must be in compliance with the applicable emission limitations (including operating limits) of 40 CFR 63 Subpart AAAAA at all times. The permittee may operate outside of the established operating parameter limit(s) during performance tests in order to establish new operating limits. [40 CFR 63.7100(a)]

**3. Testing Requirements:**

- a. Testing shall be conducted in accordance with 401 KAR 50:045, Performance Tests. The testing shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at the pollutant-specific emissions unit. [401 KAR 50:045, Section 5 (1)]
- b. For the purpose of conducting a performance test, the permittee shall install, calibrate, maintain, and operate a device for measuring the mass rate of stone feed to each rotary lime kiln. The measuring device used must be accurate to within  $\pm 5$  percent of the mass rate over its operating range. [40 CFR 60.343(d)]. The mass rate of stone feed may be calculated for each 24-hour block period based on the lime production, multiplied by a suitable factor to arrive at the equivalent stone feed rate. The methodology for defining the stone feed to lime production factor shall be established during particulate matter performance tests.
- c. The permittee must conduct a performance test within 5 years following the initial performance test and within 5 years following each subsequent performance test thereafter. [40 CFR 63.7111 and 401 KAR 50:045]
- 1) The permittee must conduct each performance test in Table 5 to 40 CFR 63, Subpart AAAAA that applies. [40 CFR 63.7112(a)]
  - 2) Each performance test must include the methods specified in rows 19 – 24 of Table 5 to 40 CFR 63, Subpart AAAAA. Each performance test must be conducted based on representative performance (i.e., performance based on normal operating conditions)

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

of the affected source and under the specific conditions in Table 5 to 40 CFR 63, Subpart AAAAA. Representative conditions exclude periods of startup and shutdown. The permittee may not conduct performance tests during periods of malfunction. The permittee must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the permittee shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. [40 CFR 63.7112(b)]

- 3) Performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR 63.7112(b). [40 CFR 63.7112(c)]
- 4) Except for opacity and VE observations, the permittee must conduct three separate test runs for each required performance test, as specified in 40 CFR 63.7(e)(3). Each test run must last at least one hour or as specified in Table 5 to 40 CFR 63, Subpart AAAAA. [40 CFR 63.7112(d)]
- 5) The emission rate of particulate matter (PM) from each lime kiln (and each lime cooler if there is a separate exhaust to the atmosphere from the lime cooler) must be computed for each run using the following equation: [40 CFR 63.7112(e)]

$$E = (C_k Q_k + C_c Q_c) / PK$$

Where:

E = emission rate of PM, lb/ton of stone feed.

C<sub>k</sub> = concentration of PM in the kiln effluent, gr/dscf.

Q<sub>k</sub> = volumetric flow rate of kiln effluent gas, dscf/hr.

C<sub>c</sub> = concentration of PM in the cooler effluent, gr/dscf. This value is zero if there is not a separate cooler exhaust to the atmosphere.

Q<sub>c</sub> = volumetric flow rate of cooler effluent gas, dscf/hr. This value is zero if there is not a separate cooler exhaust to the atmosphere.

P = stone feed rate, ton/hr.

K = conversion factor, 7000 gr/lb.

- 6) To meet a weighted average emission limit as specified in item 4 of Table 1 to 40 CFR 63, Subpart AAAAA, the permittee must calculate a combined particulate emission rate from all kilns and coolers within the permittee's LMP using the following equation: [40 CFR 63.7112(f)]

$$E_T = \sum_{i=1}^n E_i P_i / \sum_{i=1}^n P_i$$

Where:

E<sub>T</sub> = emission rate of PM from all kiln and coolers, lb/ton of stone feed

E<sub>i</sub> = emission rate of PM from kiln i, or from kiln/cooler combination i, lb/ton of stone feed

P<sub>i</sub> = stone feed rate kiln i, ton/hr

n = number of kilns to be included in the averaging. Kilns that have a PM emission limit of 0.60 lb/tsf are ineligible for any averaging.

- 7) The weighted average PM emission limit from all kilns and coolers for which the permittee is averaging must be calculated using the following equation: [40 CFR 63.7112(g)]

$$E_{TN} = \sum_{j=1}^m E_j P_j / \sum_{j=1}^m P_j$$

Where:

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- $E_{TN}$  = weighted average PM emission limit for all kilns and coolers being included in averaging at the LMP, lb/ton of stone feed
- $E_j$  = PM emission limit (0.10 or 0.12) for kiln j, or for kiln/cooler combination j, lb/ton of stone feed
- $P_j$  = stone feed rate kiln j, ton/hr
- m = number of kilns and kiln/cooler combinations to be averaged at the LMP. The same kilns in the calculation of  $E_T$  and  $E_{TN}$  must be used. Kilns that have a PM emission limit of 0.60 lb/tsf are ineligible for any averaging.
- 8) Performance test results must be documented in complete test reports that contain the information required by 40 CFR 63.7112(h)(1) through (10), as well as all other relevant information. The plan to be followed during testing must be made available to the Administrator at least 60 days prior to testing. [40 CFR 63.7112(h)]
  - 9) The permittee must establish any applicable 3-hour block average operating limit indicated in Table 3 to 40 CFR 63, Subpart AAAAA according to the applicable requirements in Table 4 to 40 CFR 63, Subpart AAAAA and 40 CFR 63.7112 paragraphs (j)(1) through (4). [40 CFR 63.7112(j)]
  - 10) During startup, the kiln must be tested hourly to determine when lime product meets the definition of on-specification lime product. [40 CFR 63.7112(m)]
- d. Performance testing in accordance with U.S. EPA Reference Method 6C for sulfur dioxide, U.S. EPA Reference Method 7E for nitrogen oxide, and U.S. EPA Reference Method 10 for carbon monoxide as specified in 401 KAR 50:015 shall be conducted once per permit term and as required by the Division. [401 KAR 50:045, Section 1]
  - e. During performance testing, the facility shall obtain one representative fuel sample per hour. These samples collectively shall be analyzed for the percent sulfur content and heating value (Btu/lb). [401 KAR 50:045, Section 1]
  - f. To claim that an LMP is an area source, the permittee must measure the emissions of hydrogen chloride from all lime kilns, except as provided in 40 CFR 63.7142(c), at the permittee's plant using either: [40 CFR 63.7142(a)]
    - 1) U.S. EPA Reference Method 320 of appendix A to part 63, or [40 CFR 63.7142(a)(1)]
    - 2) As an alternative to U.S. EPA Reference Method 320 of Appendix A, ASTM D6348-03 (Reapproved 2010) including Annexes A1 through A8 (incorporated by reference – see 40 CFR 63.14). ASTM D6348-12e1 (incorporated by reference - see 40 CFR 63.14) is an acceptable alternative to U.S. EPA Reference Method 320 of appendix A, provided that the provisions of 40 CFR 63.7142 (a)(2)(i) and (ii) are followed: [40 CFR 63.7142(a)(2)]
      - i) The test plan preparation and implementation in the Annexes to ASTM D6348-03 (Reapproved 2010), Sections A1 through A8 are mandatory. [40 CFR 63.7142(a)(2)(i)]
      - ii) In ASTM D6348-03 (Reapproved 2010) Annex A5 (Analyte Spiking Technique), the percent recovery (%R) must be determined for each target analyte (Equation A5.5). In order for the test data to be acceptable for a compound, %R must be greater than or equal to 70 percent and less than or equal to 130 percent. If the %R value does not meet this criterion for a target compound, the test data are not acceptable for that compound and the test must be repeated for that analyte (*i.e.*, the

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

sampling and/or analytical procedure should be adjusted before a retest). The %R value for each compound must be reported in the test report, and all field measurements must be corrected with the calculated %R value for that compound by using the following equation: Reported Results = ((Measured Concentration in the Stack))/(%R) × 100; or [40 CFR 63.7142(a)(2)(ii)]

- 3) U.S. EPA Reference Method 321 of appendix A to part 63. [40 CFR 63.7142(a)(3)]
- g. The permittee must complete all applicable performance tests no later than July 16, 2027. [40 CFR 63.7083(d)]
  - 1) Upon installation and start-up of the DSI-04 control device, the requirements 40 CFR 63, Subpart AAAAAA will no longer apply and the requirements of **Section B** for **EP 07 01** will go into effect.

**4. Specific Monitoring Requirements:**

- a. The permittee shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the opacity of a representative portion of the gases discharged into the atmosphere from each kiln. The span of this system shall be set at 40 percent (40%) opacity. [40 CFR 60.343(a)]
- b. For each COMS used to monitor an add-on air pollution control device, meet the requirements in 40 CFR 63.7113(g)(1) and (2) specified as follows. [40 CFR 63.7113(g)]
  - 1) Install the COMS at the outlet of the control device. [40 CFR 63.7113(g)(1)]
  - 2) Install, maintain, calibrate, and operate the COMS as required by 40 CFR part 63, Subpart A, General Provisions and according to Performance Specification (PS)-1 of Appendix B to 40 CFR 60. Facilities that operate COMS installed on or before February 6, 2001, may continue to meet the requirements in effect at the time of COMS installation unless specifically required to re-certify the COMS by their permitting authority. [40 CFR 63.7113(g)(2)]
- c. If a bag leak detection system or PM detector is not utilized, conduct a VE check daily (minimum of 6-minutes) in accordance with U.S. EPA Reference Method 9 of Appendix A to 40 CFR Part 60. Record the opacity observed in an observation log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluation. Maintain a list of all individuals who are certified U.S. EPA Reference Method 9 Visible Emissions Evaluators. [40 CFR 63.7121(f)]
- d. For each emission point equipped with an add-on air pollution control device, inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in Item 6 of Table 2 of 40 CFR 63, Subpart AAAAAA and record the results of each inspection. [40 CFR 63.7113(f)]
- e. Except for monitor malfunctions, associated repairs, required quality assurance or control activities (including, as applicable, calibration checks and required zero adjustments), the permittee must monitor continuously (or collect data at all required intervals) at all times that the emission unit is operating. [40 CFR 63.7120(b)]

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- f. Data recorded during the conditions described in 40 CFR 63.7120(c)(1) and (2) may not be used either in data averages or calculations of emission or operating limits; or in fulfilling a minimum data availability requirement. The permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system. [40 CFR 63.7120(c)]
  - 1) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments; and [40 CFR 63.7120(c)(1)]
  - 2) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies; [40 CFR 63.7120(c)(2)]
- g. The amount of material placed in the kiln (tons), amount of lime produced from the kiln (tons), amount of coal fired, diesel oil consumed for startups, and hours of operation shall be monitored and recorded on a monthly basis. [401 KAR 52:020, Section 10]
- h. In the absence of certification of the sulfur content of the coal from the supplier, the owner or operator shall obtain representative samples from each delivery of coal. These samples collectively shall be analyzed for the percent sulfur content and heating value (Btu/lb). [401 KAR 51:017]
- i. The permittee shall install, maintain, calibrate and operate a COMS as required by 40 CFR 63, Subpart A, General Provisions and according to PS-1 of Appendix B to Part 60 of Chapter I. [Table 2 to 40 CFR 63, Subpart AAAAA, Item 1.i. and 3.i.]
  - 1) The permittee shall collect the COMS data at a frequency of at least once every 15 seconds, determining block averages for each startup period and demonstrating for each startup block period the average opacity does not exceed fifteen percent (15%). [Table 2 to 40 CFR 63, Subpart AAAAA, Item 1.ii.]
  - 2) The permittee shall collect the COMS data at a frequency of at least once every 15 seconds, determining block averages for each 6-minute period of a shutdown event and demonstrating for each 6-minute block period the average opacity does not exceed fifteen percent (15%). [Table 2 to 40 CFR 63, Subpart AAAAA, Item 3.ii.]

**5. Specific Recordkeeping Requirements:**

- a. The permittee shall maintain records of inspection of each capture/collection and closed vent system. [40 CFR 63.7113(f)]
- b. The permittee shall maintain records of all routine and non-routine maintenance activities performed on the baghouse. These records shall include, at a minimum, the date, the name(s) of the person or organization performing the maintenance, and a description of the maintenance completed. [401 KAR 52:020, Section 10]
- c. The permittee must keep records as follows: [40 CFR 63.7132(a)]
  - 1) A copy of each notification and report that the permittee submitted to comply with 40 CFR 63, Subpart AAAAA, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7132(a)(1)]
  - 2) Records for each startup period of the date, the time startup began, the time began producing on-specification lime product, and the time discharge from the kiln began

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- for any affected source that is subject to a standard during startup that differs from the standard applicable at other times. [40 CFR 63.7132(a)(2)(i)]
- 3) Records of the date, time, cause and duration of each malfunction (as defined in 40 CFR 63.2) that causes an affected source to fail to meet an applicable standard; if there was also a monitoring malfunction, the date, time, cause, and duration of the monitoring malfunction; the record must list the affected source or equipment; if there was a failure to meet a particulate matter emissions limit, an estimate of the volume of each regulated pollutant emitted over the limit, and a description of the method used to estimate the emissions. [40 CFR 63.7132(a)(2)(ii)]
  - 4) Records of performance tests, performance evaluations, and opacity and VE observations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.7132(a)(3)]
- d. The permittee must keep the records in 40 CFR 63.6(h)(6) for VE observations. [40 CFR 63.7132(b)]
  - e. The permittee must keep the records required by Tables 6 and 7 to 40 CFR 63, Subpart AAAAA to show continuous compliance with each emission limitation that applies to the permittee. [40 CFR 63.7132(c)]
  - f. The permittee must keep records which document the basis for the initial applicability determination as required under 40 CFR 63.7081. [40 CFR 63.7132(d)]
  - g. The permittee must keep visual observation records and U.S. EPA Reference Method 9 observation records, and any inspections and repair records in a designated paper or electronic logbook. Records shall be maintained for five years. [401 KAR 52:020, Section 10]
  - h. Performance test results must be documented in complete test reports that contain the information required by 40 CFR 63.7112(h)(1) through (10), as well as all other relevant information. The plan to be followed during testing must be made available to the Administrator at least 60 days prior to testing. [40 CFR 63.7112(h)]
    - 1) A brief description of the process and the air pollution control system; [40 CFR 63.7112(h)(1)]
    - 2) Sampling location description(s); [40 CFR 63.7112(h)(2)]
    - 3) A description of sampling and analytical procedures and any modifications to standard procedures; [40 CFR 63.7112(h)(3)]
    - 4) Test results, including opacity; [40 CFR 63.7112(h)(4)]
    - 5) Quality assurance procedures and results; [40 CFR 63.7112(h)(5)]
    - 6) Records of operating conditions during the test, preparation of standards, and calibration procedures; [40 CFR 63.7112(h)(6)]
    - 7) Raw data sheets for field sampling and field and laboratory analyses; [40 CFR 63.7112(h)(7)]
    - 8) Documentation of calculations; [40 CFR 63.7112(h)(8)]
    - 9) All data recorded and used to establish operating limits; and [40 CFR 63.7112(h)(9)]
    - 10) Any other information required by the test method. [40 CFR 63.7112(h)(10)]
  - i. Maintain records of the amount of material placed in the kiln (ton), amount of lime produced from the kiln (ton) processed, amount of coal fired, diesel oil consumed for startups, and hours of operation on a monthly basis. [401 KAR 52:020, Section 10]

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- j. Records of the heat content (Btu/lb) and sulfur content (percent) of coal sampled each month shall be maintained. [401 KAR 51:017]
- k. The permittee records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). [40 CFR 63.7133(a)]
- l. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.7133(b)]
- m. The permittee must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee may keep the records offsite for the remaining 3 years. [40 CFR 63.7133(c)]
- n. Any records required to be maintained by this part that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation. [40 CFR 63.7133(d)]

**6. Specific Reporting Requirements:**

- a. After conducting a performance test, design evaluation, opacity observation, VE observation, or other initial compliance demonstration as specified in Table 4 or 5 to 40 CFR 63, Subpart AAAAA, the permittee must submit a Notification of Compliance Status following the procedure specified in 40 CFR 63.7131(h). [40 CFR 63.7130(e)]
  - 1) For each initial compliance demonstration required in Table 4 to 40 CFR 63, Subpart AAAAA that does not include a performance test, the permittee must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration. [40 CFR 63.7130(e)(1)]
  - 2) For each compliance demonstration required in Table 6 to 40 CFR 63, Subpart AAAAA that includes a performance test conducted according to the requirements in Table 5 to 40 CFR 63, Subpart AAAAA, the permittee must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to 40 CFR 63.10(d)(2). [40 CFR 63.7130(e)(2)]
- b. Changes to the prepared and implemented written operations, maintenance, and monitoring (OM&M) plan must be submitted to the Division for review and approval. Pending approval by the field office of an initial or amended plan, the facility shall comply with the provisions of the submitted plan. Each plan must contain the following information: [40 CFR 63.7100(d)]
  - 1) Process and control device parameters to be monitored to determine compliance, along with established operating limits or ranges, as applicable, for each emission unit. [40 CFR 63.7100(d)(1)]
  - 2) A monitoring schedule for each emission unit. [40 CFR 63.7100(d)(2)]



**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- 3) Procedures for the proper operation and maintenance of each emission unit and each air pollution control device used to meet the applicable emission limitations and operating limits in Tables 1, 2 and 3 to 40 CFR 63, Subpart AAAAA, respectively. The OM&M plan must address periods of startup and shutdown. [40 CFR 63.7100(d)(3)]
  - 4) Procedures for the proper installation, operation, and maintenance of monitoring devices or systems used to determine compliance, including: [40 CFR 63.7100(d)(4)]
    - i) Calibration and certification of accuracy of each monitoring device; [40 CFR 63.7100(d)(4)(i)]
    - ii) Performance and equipment specifications for the sample interface, parametric signal analyzer, and the data collection and reduction systems; [40 CFR 63.7100(d)(4)(ii)]
    - iii) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.7100(c) and 40 CFR 63.8(c)(1)(ii), (c)(3), and (c)(4)(ii); and [40 CFR 63.7100(d)(4)(iii)]
    - iv) Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d). [40 CFR 63.7100(d)(4)(iv)]
  - 5) Procedures for monitoring process and control device parameters. [40 CFR 63.7100(d)(5)]
  - 6) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the operating limits specified in Table 3 to 40 CFR 63, Subpart AAAAA: [40 CFR 63.7100(d)(6)]
    - i) Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and [40 CFR 63.7100(d)(6)(i)]
    - ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time and date the corrective action was completed. [40 CFR 63.7100(d)(6)(ii)]
  - 7) A maintenance schedule for each emission unit and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance. [40 CFR 63.7100(d)(7)]
- c. The permittee must report each instance in which the emission point did not meet each operating limit, opacity limit, and VE limit in Tables 2, 3 and 7 to 40 CFR 63, Subpart AAAAA that applies. These deviations must be reported according to the requirements in 40 CFR 63.7131. [40 CFR 63.7121(b)]
  - d. Submit reports of excess emissions of all 6-minute periods during which the average opacity of the visible emissions from any lime kiln utilizing a continuous monitoring system is greater than 15 percent. [40 CFR 60.343(e)]
  - e. The permittee must submit a compliance report semiannually according to the requirements in 40 CFR 63.7131(b). [40 CFR 63.7131(a); Table 8 to 40 CFR 63, Subpart AAAAA Item 1]
  - f. Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. [40 CFR 63.7131(b)(3)]

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- g. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. [40 CFR 63.7131(b)(4)]
- h. The compliance report must contain the information specified in 40 CFR 63.7131(c)(1) through (6). [40 CFR 63.7131(c)]
- i. For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and VE limit) that occurs at an affected source where the permittee is not using a CMS to comply with the emission limitations in 40 CFR 63, Subpart AAAAA, the compliance report must contain the information specified in 40 CFR 63.7131(c)(1) through (4) and 40 CFR 63.7131(d) (1) and (2). The deviations must be reported in accordance with the requirements in 40 CFR 63.10(d) prior to the relevant compliance date for the permittee's source as specified in 40 CFR 63.7083(g) and the requirements in 40 CFR 63.10(d)(1) through (4) beginning on the relevant compliance date for the permittee's source as specified in 40 CFR 63.7083(g). [40 CFR 63.7131(d)]
  - 1) The total operating time of each emission unit during the reporting period. [40 CFR 63.7131(d)(1)]
  - 2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), and the corrective action taken. [40 CFR 63.7131(d)(2)]
  - 3) An estimate of the quantity of each regulated pollutant emitted over a non-opacity or VE emission limit, and a description of the method used to estimate the emissions. [40 CFR 63.7131(d)(3)]
- j. For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and VE limit) occurring at an affected source where the permittee is using a CMS to comply with the emission limitation in 40 CFR 63, Subpart AAAAA, the permittee must include the information specified in 40 CFR 63.7131(c)(1) through (4) and 40 CFR 63.7131(e)(1) through (1). This includes periods of startup, shutdown, and malfunction. [40 CFR 63.7131(e)]
  - 1) The date and time that each malfunction started and stopped. [40 CFR 63.7131(e)(1)]
  - 2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks. [40 CFR 63.7131(e)(2)]
  - 3) The date, time and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8). [40 CFR 63.7131(e)(3)]
  - 4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period. [40 CFR 63.7131(e)(4)]
  - 5) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total affected source operating time during that reporting period. [40 CFR 63.7131(e)(5)]
  - 6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes. [40 CFR 63.7131(e)(6)]
  - 7) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total emission unit operating time during that reporting period. [40 CFR 63.7131(e)(7)]
  - 8) A brief description of the process units. [40 CFR 63.7131(e)(8)]

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- 9) A brief description of the CMS. [40 CFR 63.7131(e)(9)]
  - 10) The date of the latest CMS certification or audit. [40 CFR 63.7131(e)(10)]
  - 11) A description of any changes in CMS, processes, or controls since the last reporting period. [40 CFR 63.7131(e)(11)]
  - 12) An estimate of the quantity of each regulated pollutant emitted over a non-opacity or VE emission limit, and a description of the method used to estimate the emissions. [40 CFR 63.7131(e)(12)]
- k. Each facility that has obtained a Title V operating permit pursuant to 40 CFR 70 or 40 CFR 71 must report all deviations as defined in 40 CFR 63, Subpart AAAAA in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A) of Chapter I. If the permittee submits a compliance report specified in Table 8 to 40 CFR 63, Subpart AAAAA along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A) of Chapter I, and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the permittee may have to report deviations from permit requirements to the permit authority. [40 CFR 63.7131(f)]
- l. The permittee must submit semiannual compliance reports and performance reports to the U.S. EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the U.S. EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The permittee must use the appropriate electronic report template on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri>) for 40 CFR 63, Subpart AAAAA. The date report templates become available will be listed on the CEDRI website. The report must be submitted by the deadline specified in 40 CFR 63, Subpart AAAAA, regardless of the method in which the report is submitted. The U.S. EPA will make all the information submitted through CEDRI available to the public without further notice to the permittee. Do not use CEDRI to submit information claimed as Confidential Business Information (CBI). Although the Administrator does not expect persons to assert a claim of CBI, if the permittee wishes to assert a CBI claim for some of the information in the report, the permittee must submit a complete file, including information claimed to be CBI, to the U.S. EPA following the procedures in 40 CFR 63.7131(g). Clearly mark the part or all of the information that the permittee claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. The permittee must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described earlier. [40 CFR 63.7131(g)]
- 1) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services.

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- Electronic submissions must be transmitted directly to the Office of Air Quality Planning and Standards (OAQPS) CBI Office at the email address *oaqpscbi@epa.gov*, and as described above, should include clear CBI markings and be flagged to the attention of the Lime Manufacturing Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if the permittee does not have their own file sharing service, please email *oaqpscbi@epa.gov* to request a file transfer link. [40 CFR 63.7131(g)(1)]
- 2) If the permittee cannot transmit the file electronically, the permittee may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, P.O. Box 12055, Research Triangle Park, North Carolina 27711, Attention Lime Manufacturing Sector Lead. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope. [40 CFR 63.7131(g)(2)]
- m. Within 60 days after the date of completing each performance test required by 40 CFR 63, Subpart AAAAA, the permittee must submit the results of the performance test following the procedures specified in 40 CFR 63.7131(h)(1) through (3). [40 CFR 63.7131(h)]
- 1) Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test. Submit the results of the performance test to the EPA via CEDRI, which can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, the permittee may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. [40 CFR 63.7131(h)(1)]
- 2) Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test. The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI. [40 CFR 63.7131(h)(2)]
- 3) Confidential business information (CBI). [40 CFR 63.7131(h)(3)]
- i) The EPA will make all the information submitted through CEDRI available to the public without further notice to the permittee. Do not use CEDRI to submit information the permittee claim as CBI. Although we do not expect persons to assert a claim of CBI, if the permittee wish to assert a CBI claim for some of the information submitted under 40 CFR 63.7131(a)(1) or (2), the permittee must submit a complete file, including information claimed to be CBI, to the U.S. EPA. [40 CFR 63.7131(h)(3)(i)]
- ii) The file must be generated using the U.S. EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. [40 CFR 63.7131(h)(3)(ii)]
- iii) Clearly mark the part or all of the information that is claimed to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. [40 CFR 63.7131(h)(3)(iii)]
- iv) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services.

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov), and as described above, should include clear CBI markings and be flagged to the attention of the Group Leader, Measurement Policy Group. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if the permittee does not have their own file sharing service, please email [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov) to request a file transfer link. [40 CFR 63.7131(h)(3)(iv)]

- v) If the permittee cannot transmit the file electronically, they may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, P.O. Box 12055, Research Triangle Park, North Carolina 27711, Attention Group Leader, Measurement Policy Group. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope. [40 CFR 63.7131(h)(3)(v)]
  - vi) All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the U.S. EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. [40 CFR 63.7131(h)(3)(vi)]
  - vii) The permittee must submit the same file submitted to the CBI office with the CBI omitted to the U.S. EPA via the U.S. EPA's CDX as described in 40 CFR 63.7131(h)(1) and (2). [40 CFR 63.7131(h)(3)(vii)]
- n. If the permittee is required to electronically submit a report or notification through CEDRI in the EPA's CDX, the permittee may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, the permittee must meet the requirements outlined in 40 CFR 63.7131(i)(1) through (7). [40 CFR 63.7131(i)]
- 1) The permittee must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems. [40 CFR 63.7131(i)(1)]
  - 2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due. [40 CFR 63.7131(i)(2)]
  - 3) The outage may be planned or unplanned. [40 CFR 63.7131(i)(3)]
  - 4) The permittee must submit notification to the Administrator in writing as soon as possible following the date the permittee first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting. [40 CFR 63.7131(i)(4)]
  - 5) The permittee must provide to the Administrator a written description identifying: [40 CFR 63.7131(i)(5)]
    - i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable; [40 CFR 63.7131(i)(5)(i)]
    - ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage; [40 CFR 63.7131(i)(5)(ii)]
    - iii) Measures taken or to be taken to minimize the delay in reporting; and [40 CFR 63.7131(i)(5)(iii)]

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- iv) The date by which the permittee proposes to report, or if the permittee has already met the reporting requirement at the time of the notification, the date the permittee reported. [40 CFR 63.7131(i)(5)(iv)]
- 6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator. [40 CFR 63.7131(i)(6)]
- 7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. [40 CFR 63.7131(i)(7)]
- o. If the permittee is required to electronically submit a report through CEDRI in the EPA's CDX, the permittee may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, the permittee must meet the requirements outlined in 40 CFR 63.7131(j)(1) through (5). [40 CFR 63.7131(j)]
  - 1) The permittee may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the permittee from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage). [40 CFR 63.7131(j)(1)]
  - 2) The permittee must submit notification to the Administrator in writing as soon as possible following the date the permittee first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting. [40 CFR 63.7131(j)(2)]
  - 3) The permittee must provide to the Administrator: [40 CFR 63.7131(j)(3)]
    - i) A written description of the force majeure event; [40 CFR 63.7131(j)(3)(i)]
    - ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; [40 CFR 63.7131(j)(3)(ii)]
    - iii) Measures taken or to be taken to minimize the delay in reporting; and [40 CFR 63.7131(j)(3)(iii)]
  - iv) The date by which the permittee propose to report, or if the permittee have already met the reporting requirement at the time of the notification, the date the permittee reported. [40 CFR 63.7131(j)(3)(iv)]
  - 4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator. [40 CFR 63.7131(j)(4)]
  - 5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. [40 CFR 63.7131(j)(5)]

**7. Specific Control Equipment Operating Conditions:**

- a. The baghouse shall be operated to maintain compliance with permitted emission limitations, consistent with manufacturer's specifications and standard operating practices. [401 KAR 50:055, Section 2]

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- b. Records regarding the maintenance of the dust collection system shall be maintained. [401 KAR 52:020, Section 10]

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)****ALTERNATE OPERATING SCENARIO FOR EMISSION GROUP 8 – ROTARY LIME KILNS #1 through #3****Emission Group 8: KL01, KL02, KL03 – Rotary Kilns**

EP	Name	Capacity (tons/hr)	Construction Date	Control Device
06 01	Rotary Lime Kiln #1 KVS (17' X 203') Primary Fuel: Pulverized Coal, Startup Fuel: Diesel Oil	50	7/1/1976	Multi-Cyclone (Flex-Kleen Model 35C-24 Cyclotrell Series 5); Reverse-Air Baghouse (American Air Filter Model Amertherm Collector)
06 02	Rotary Lime Kiln #2 KVS (17' X 203') Primary Fuel: Pulverized Coal, Startup Fuel: Diesel Oil	50		
06 03	Rotary Lime Kiln #3 KVS (17' X 203') Primary Fuel: Pulverized Coal, Startup Fuel: Diesel Oil	50		

**APPLICABLE REGULATIONS:****401 KAR 59:010, New process operations****401 KAR 63:002, Section 2(2)(ffff) 40 C.F.R. 63.7080 through 63.7143, Tables 1 through 8 (Subpart AAAAA), National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants****40 CFR 64, Compliance Assurance Monitoring (CAM)****1. Operating Limitations:**

- a. Maintain and operate the fabric filter baghouse such that the bag leak detector system (BLDS) or PM detector alarm condition does not exist for more than 5 percent of the total operating time in a 6-month period; and comply with the requirements in 40 CFR 63.7113(d) through (f) and Table 6 to 40 CFR 63, Subpart AAAAA. In lieu of a BLDS or PM detector, maintain the fabric filter baghouse such that the 6-minute average opacity for any 6-minute block period does not exceed 15 percent; and comply with the requirements in 40 CFR 63.7113(f) and (g) and Table 6 to 40 CFR 63, Subpart AAAAA. [40 CFR 63.7090(b); Table 3, Item 1 to 40 CFR 63, Subpart AAAAA]
- b. Prepare and implement a written operations, maintenance, and monitoring (OM&M) plan. The plan must include items listed in 40 CFR 63.7100(d) and the corrective actions to be taken when required in Table 6 to 40 CFR 63, Subpart AAAAA. [40 CFR 63.7090(b); Table 3, Item 5 to 40 CFR 63, Subpart AAAAA]
- c. The emission points must be in compliance with the operating limits of 40 CFR 63, Subpart AAAAA at all times. The permittee may operate outside of the established operating parameter limit(s) during performance tests in order to establish new operating limits. [40 CFR 63.7100(a)]
- d. The permittee must always operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with



**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7100(c)]

**2. Emission Limitations:**

- a. Emissions of particulate matter shall not exceed 0.12 lb/ton of stone feed (lb/tsf) except during startup and shutdown. Weighted average PM emissions may be determined according to Equation 2 in 40 CFR 63.7112 and must not exceed 0.12 lb/tsf. [40 CFR 63.7090(a); Table 1, Item 1 to 40 CFR 63, Subpart AAAAA]

**Compliance Demonstration Method:**

Compliance shall be demonstrated through performance testing required under **3. Testing Requirements b.**

- b. During each startup, visible emissions must not exceed fifteen percent (15%) opacity (based on startup period block average). [40 CFR 63.7090(c); Table 2, Item 1 to 40 CFR 63, Subpart AAAAA]

**Compliance Demonstration Method:**

Compliance shall be demonstrated through monitoring required under **4. Specific Monitoring Requirements h.**

- c. During each shutdown, visible emissions must not exceed fifteen percent (15%) opacity (based on 6-minute average opacity for any 6-minute block period). [40 CFR 63.7090(c); Table 2, Item 3 to 40 CFR 63, Subpart AAAAA]

**Compliance Demonstration Method:**

Compliance shall be demonstrated through performance testing required under **4. Specific Monitoring Requirements h.**

- d. The permittee must comply with the below emission limitations and must have completed all applicable performance tests no later than July 16, 2027: [40 CFR 63.7083(d)]
  - 1) HCl emissions must not exceed 0.52 lb/ton of lime produced. [Table 1 to 40 CFR 63, Subpart AAAAA, Item 8]
  - 2) Mercury emissions must not exceed 34 lb/MMton of lime produced. [Table 1 to 40 CFR 63, Subpart AAAAA, Item 14]
  - 3) Total Organic HAP emissions must not exceed 2.6 ppmvd at 7% O<sub>2</sub>. [Table 1 to 40 CFR 63, Subpart AAAAA, Item 15]
  - 4) Dioxins and furans (D/F) emissions must not exceed 0.037 ng/dscm at 7% O<sub>2</sub>. [Table 1 to 40 CFR 63, Subpart AAAAA, Item 16]

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)****Compliance Demonstration Method:**

The permittee must demonstrate initial compliance with each emission limit in Table 1 to 40 CFR 63, Subpart AAAAAA that applies, according to Table 4 to 40 CFR 63, Subpart AAAAAA. The permittee may perform VE measurements in accordance with U.S. EPA Reference Method 9 of appendix A to part 60 in lieu of installing a COMS or PM detector if any of the conditions in 40 CFR 63.7114(a)(1) through (3) exist: [40 CFR 63.7114(a)]

- 1) The permittee uses a FF for PM control, and the FF is under positive pressure and has multiple stacks; or [40 CFR 63.7114(a)(1)]
- 2) The control device exhausts through a monovent; or [40 CFR 63.7114(a)(2)]
- 3) The installation of a COMS in accordance with PS-1 of appendix B to part 60 is infeasible. [40 CFR 63.7114(a)(3)]
- 4) Compliance must be demonstrated by July 16, 2027, unless the permittee demonstrates that they are no longer a major source of HAPs. See **3. Testing Requirements** d. below.

- e. For emissions from a control device or stack the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A:

[401 KAR 59:010, Section 3(2)]

- 1) For  $P \leq 0.5$  ton/hr:  $E = 2.34$
- 2) For  $P$  from 0.5 ton/hr to 30 ton/hr:  $E = 3.59P^{0.62}$
- 3) For  $P > 30$  ton/hr:  $E = 17.31P^{0.16}$

Where:

$E$  = rate of emission in lb/hr and;

$P$  = process weight rate in tons/hr

- f. Any continuous emissions into the open air shall not equal or exceed twenty percent (20%) opacity. [401 KAR 59:010, Section 3(1)(a)]

**Compliance Demonstration Method:**

- 1) The emission points listed above are assumed to be in compliance with the PM emission limit when the control devices listed above are used in conjunction with the associated emission point and properly maintained. Refer to **4. Specific Monitoring Requirements**.
- 2) For compliance with the opacity limitations, refer to **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements**.

- g. Each emission point must be in compliance with the emission limitations of 40 CFR 63, Subpart AAAAAA at all times. [40 CFR 63.7100(a)]

**3. Testing Requirements:**

- a. Testing shall be conducted in accordance with 401 KAR 50:045, Performance Tests, the testing shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at the pollutant-specific emissions unit

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- b. The permittee must conduct a performance test in accordance within 5 years following the initial performance test and within 5 years following each subsequent performance test thereafter. [40 CFR 63.7111 and 401 KAR 50:045]

- 1) The permittee must conduct each performance test in Table 5 to 40 CFR 63, Subpart AAAAA that applies. [40 CFR 63.7112(a)]
- 2) Each performance test must include the methods specified in rows 19 – 24 of Table 5 to 40 CFR 63, Subpart AAAAA. Each performance test must be conducted based on representative performance (i.e., performance based on normal operating conditions) of the affected source and under the specific conditions in Table 5 to 40 CFR 63, Subpart AAAAA. Representative conditions exclude periods of startup and shutdown. The permittee may not conduct performance tests during periods of malfunction. The permittee must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the permittee shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. [40 CFR 63.7112(b)]
- 3) Performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR 63.7112(b). [40 CFR 63.7112(c)]
- 4) Except for opacity and VE observations, the permittee must conduct three separate test runs for each required performance test, as specified in 40 CFR 63.7(e)(3). Each test run must last at least one hour or as specified in Table 5 to 40 CFR 63, Subpart AAAAA. [40 CFR 63.7112(d)]
- 5) The emission rate of particulate matter (PM) from each lime kiln (and each lime cooler if there is a separate exhaust to the atmosphere from the lime cooler) must be computed for each run using the following equation: [40 CFR 63.7112(e)]

$$E = (C_k Q_k + C_c Q_c) / PK$$

Where:

E = emission rate of particulate matter, lb/ton of stone feed

C<sub>k</sub> = concentration of particulate matter in the kiln effluent, gr/dscf

Q<sub>k</sub> = volumetric flow rate of kiln effluent gas, dscf/hr

C<sub>c</sub> = concentration of particulate matter in the cooler effluent, gr/dscf

Q<sub>c</sub> = volumetric flow rate of cooler effluent gas, dscf/hr

P = stone feed rate, ton/hr

K = conversion factor, 7000 gr/lb

- 6) To meet a weighted average emission limit as specified in item 4 of Table 1 to 40 CFR 63, Subpart AAAAA, the permittee must calculate a combined particulate emission rate from all kilns and coolers within the permittee's LMP using the following equation: [40 CFR 63.7112(f)]

$$E_T = \sum_{i=1}^n E_i P_i / \sum_{i=1}^n P_i$$

Where:

E<sub>T</sub> = emission rate of particulate matter from all kiln and coolers, lb/ton of stone feed

E<sub>i</sub> = emission rate from kiln i, or from kiln/cooler combination i, lb/ton of stone feed

P<sub>i</sub> = stone feed rate kiln i, ton/hr

n = number of kilns the permittee wish to include in the averaging

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- 7) The weighted average PM emission limit from all kilns and coolers for which the permittee is averaging must be calculated using the following equation: [40 CFR 63.7112(g)]

$$E_{TN} = \sum_{j=1}^m E_j P_j / \sum_{j=1}^m P_j$$

Where:

$E_{TN}$  = weighted average particulate matter emission limit for all kilns and coolers being included in averaging at the LMP, lb/ton of stone feed

$E_j$  = particulate matter emission limit (0.1 or 0.12) for kiln j, or for kiln/cooler combination j, lb/ton of stone feed

$P_j$  = stone feed rate kiln j, ton/hr

$m$  = number of kilns and kiln/cooler combinations to be averaged at the LMP. The same kilns in the calculation of ET and ETN must be used. Kilns that have a PM emission limit of 0.60 lb/tsf are ineligible for any averaging.

- 8) Performance test results must be documented in complete test reports that contain the information required by 40 CFR 63.711 (h)(1) through (10), as well as all other relevant information. The plan to be followed during testing must be made available to the Administrator at least 60 days prior to testing. [40 CFR 63.7112(h)]
- 9) The permittee must establish any applicable 3-hour block average operating limit indicated in Table 3 to 40 CFR 63, Subpart AAAAA according to the applicable requirements in Table 4 to 40 CFR 63, Subpart AAAAA and 40 CFR 63.7112 paragraphs (j)(1) through (4). [40 CFR 63.7112(j)]
- 10) During startup, the kiln must be tested hourly to determine when lime product meets the definition of on-specification lime product. [40 CFR 63.7112(m)]
- c. During startup, kilns must be tested hourly to determine when lime product meets the definition of on-specification lime product. [40 CFR 63.7112(m)]
- d. To claim that an LMP is an area source, the permittee must measure the emissions of hydrogen chloride from all lime kilns, except as provided in 40 CFR 63.7142(c), at the permittee's plant using either: [40 CFR 63.7142(a)]
- 1) U.S. EPA Reference Method 320 of appendix A to part 63, or [40 CFR 63.7142(a)(1)]
  - 2) As an alternative to U.S. EPA Reference Method 320 of Appendix A, ASTM D6348-03 (Reapproved 2010) including Annexes A1 through A8 (incorporated by reference – see 40 CFR 63.14). ASTM D6348-12e1 (incorporated by reference - see 40 CFR 63.14) is an acceptable alternative to U.S. EPA Reference Method 320 of appendix A, provided that the provisions of 40 CFR 63.7142 (a)(2)(i) and (ii) are followed: [40 CFR 63.7142(a)(2)]
    - i) The test plan preparation and implementation in the Annexes to ASTM D6348-03 (Reapproved 2010), Sections A1 through A8 are mandatory. [40 CFR 63.7142(a)(2)(i)]
    - ii) In ASTM D6348-03 (Reapproved 2010) Annex A5 (Analyte Spiking Technique), the percent recovery (%R) must be determined for each target analyte (Equation A5.5). In order for the test data to be acceptable for a compound, %R must be greater than or equal to 70 percent and less than or equal to 130 percent. If the %R value does not meet this criterion for a target compound, the test data are not acceptable for that compound and the test must be repeated for that analyte (*i.e.*, the

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

sampling and/or analytical procedure should be adjusted before a retest). The %R value for each compound must be reported in the test report, and all field measurements must be corrected with the calculated %R value for that compound by using the following equation: Reported Results = ((Measured Concentration in the Stack)/(%R) × 100; or [40 CFR 63.7142(a)(2)(ii)]

- 3) U.S. EPA Reference Method 321 of appendix A to part 63. [40 CFR 63.7142(a)(3)]
- e. The permittee must complete all applicable performance tests no later than July 16, 2027. [40 CFR 63.7083(d)]
  - 1) Upon installation and start-up of the DSI-01, DSI-02, and DSI-03 control devices, the requirements 40 CFR 63, Subpart AAAAA will no longer apply and the requirements of **Section B** for **EP 06 01 – EP 06 03** will go into effect.

**4. Specific Monitoring Requirements:**

- a. The permittee shall install, calibrate, maintain, and operate a monitoring device to measure the static pressure drop across the kiln baghouse. The monitoring device shall be read and the reading recorded once per week during operation of the unit. [401 KAR 52:020, Section 10]
- b. Following a reading outside of the pressure drop range specified in the OM&M: [401 KAR 52:020, Section 10]
  - 1) Maintenance personnel will inspect the baghouse and operations immediately and make needed repairs as soon as practicable.
  - 2) Upon completed corrective action, the permittee shall take a follow-up differential pressure reading and ensure the pressure drop has returned to normal range.
- c. If a bag leak detection system or PM detector is not utilized, conduct a VE check daily (minimum of 6-minutes) in accordance with U.S. EPA Reference Method 9 of Appendix A to 40 CFR Part 60. Record the opacity observed in an observation log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluation. Maintain a list of all individuals who are certified U.S. EPA Reference Method 9 Visible Emissions Evaluators. [40 CFR 63.7121(f)]
- d. For each emission unit equipped with an add-on air pollution control device, inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in Item 6 of Table 2 of 40 CFR 63, Subpart AAAAA and record the results of each inspection. [40 CFR 63.7113(f)]
- e. Except for monitor malfunctions, associated repairs, required quality assurance or control activities (including, as applicable, calibration checks and required zero adjustments), the permittee must monitor continuously (or collect data at all required intervals) at all times that the emission unit is operating. [40 CFR 63.7120(b)]
- f. Data recorded during the conditions described in 40 CFR 63.7120(c)(1) and (2) may not be used either in data averages or calculations of emission or operating limits; or in fulfilling a minimum data availability requirement. The permittee must use all the data

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

collected during all other periods in assessing the operation of the control device and associated control system. [40 CFR 63.7120(c)]

- 1) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments; and [40 CFR 63.7120(c)(1)]
  - 2) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies; [40 CFR 63.7120(c)(2)]
- g. The amount of material placed in the kiln (tons), amount of lime produced from the kiln (tons), amount of coal fired, diesel oil consumed for startups, and hours of operation shall be monitored and recorded on a monthly basis. [401 KAR 52:020, Section 10]
- h. The permittee shall install, maintain, calibrate and operate a COMS as required by 40 CFR 63, Subpart A, General Provisions and according to PS-1 of Appendix B to Part 60 of this chapter. [Table 2 to 40 CFR 63, Subpart AAAAA, Item 1.i. and 3.i.]
- 1) The permittee shall collect the COMS data at a frequency of at least once every 15 seconds, determining block averages for each startup period and demonstrating for each startup block period the average opacity does not exceed fifteen percent (15%). [Table 2 to 40 CFR 63, Subpart AAAAA, Item 1.ii.]
  - 2) The permittee shall collect the COMS data at a frequency of at least once every 15 seconds, determining block averages for each 6-minute period of a shutdown event and demonstrating for each 6-minute block period the average opacity does not exceed fifteen percent (15%). [Table 2 to 40 CFR 63, Subpart AAAAA, Item 3.ii.]

**5. Specific Recordkeeping Requirements:**

- a. The permittee shall maintain records of inspection of each capture/collection and closed vent system. [40 CFR 63.7113(f)]
- b. The permittee shall maintain records of all routine and non-routine maintenance activities performed on the baghouse. These records shall include, at a minimum, the date, the name(s) of the person or organization performing the maintenance, and a description of the maintenance completed. [401 KAR 52:020, Section 10]
- c. The permittee shall keep records as follows: [40 CFR 63.7132(a)]
  - 1) A copy of each notification and report that the permittee submitted to comply with 40 CFR 63, Subpart AAAAA, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7132(a)(1)]
  - 2) Records for each startup period of the date, the time startup began, the time began producing on-specification lime product, and the time discharge from the kiln began for any affected source that is subject to a standard during startup that differs from the standard applicable at other times. [40 CFR 63.7132(a)(2)(i)]
  - 3) Records of the date, time, cause and duration of each malfunction (as defined in 40 CFR 63.2) that causes an affected source to fail to meet an applicable standard; if there was also a monitoring malfunction, the date, time, cause, and duration of the monitoring malfunction; the record must list the affected source or equipment; if there was a failure to meet a particulate matter emissions limit, an estimate of the volume of each regulated pollutant emitted over the limit, and a description of the method used to estimate the emissions. [40 CFR 63.7132(a)(2)(ii)]

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- 4) Records of performance tests, performance evaluations, and opacity and VE observations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.7132(a)(3)]
- d. The permittee must keep the records in 40 CFR 63.6(h)(6) for VE observations. [40 CFR 63.7132(b)]
- e. The permittee must keep the records required by Tables 6 and 7 to 40 CFR 63, Subpart AAAAA to show continuous compliance with each emission limitation that applies. [40 CFR 63.7132(c)]
- f. The permittee must keep records which document the basis for the initial applicability determination as required under 40 CFR 63.7081. [40 CFR 63.7132(d)]
- g. The permittee must keep visual observation records and U.S. EPA Reference Method 9 observation records, and any inspections and repair records in a designated paper or electronic logbook. Records shall be maintained for five years. [401 KAR 52:020, Section 10]
- h. Performance test results must be documented in complete test reports that contain the information required by 40 CFR 63.7112(h)(1) through (10), as well as all other relevant information. The plan to be followed during testing must be made available to the Administrator at least 60 days prior to testing. [40 CFR 63.7112(h)]
  - 1) A brief description of the process and the air pollution control system; [40 CFR 63.7112(h)(1)]
  - 2) Sampling location description(s); [40 CFR 63.7112(h)(2)]
  - 3) A description of sampling and analytical procedures and any modifications to standard procedures; [40 CFR 63.7112(h)(3)]
  - 4) Test results, including opacity; [40 CFR 63.7112(h)(4)]
  - 5) Quality assurance procedures and results; [40 CFR 63.7112(h)(5)]
  - 6) Records of operating conditions during the test, preparation of standards, and calibration procedures; [40 CFR 63.7112(h)(6)]
  - 7) Raw data sheets for field sampling and field and laboratory analyses; [40 CFR 63.7112(h)(7)]
  - 8) Documentation of calculations; [40 CFR 63.7112(h)(8)]
  - 9) All data recorded and used to establish operating limits; and [40 CFR 63.7112(h)(9)]
  - 10) Any other information required by the test method. [40 CFR 63.7112(h)(10)]
- i. Maintain records of the weekly differential pressure readings on the kiln baghouse. Records shall, at a minimum, include the date and time of the reading, and the reading value. Records shall also include information on any corrective actions taken when readings outside the appropriate range are recorded. [401 KAR 52:020, Section 10]
- j. Maintain records of the amount of material placed in the kiln (ton), amount of lime produced from the kiln (ton) processed, amount of coal fired, diesel oil consumed for startups, and hours of operation on a monthly basis. [401 KAR 52:020, Section 10]
- k. The permittee records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). [40 CFR 63.7133(a)]

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- l. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.7133(b)]
- m. The permittee must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee may keep the records offsite for the remaining 3 years. [40 CFR 63.7133(c)]
- n. Any records required to be maintained by this part that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation. [40 CFR 63.7133(d)]

**6. Specific Reporting Requirements:**

- a. After conducting a performance test, design evaluation, opacity observation, VE observation, or other initial compliance demonstration as specified in Table 4 or 5 to 40 CFR 63, Subpart AAAAA, the permittee must submit a Notification of Compliance Status following the procedure specified in 40 CFR 63.7131(h). [40 CFR 63.7130(e)]
  - 1) For each initial compliance demonstration required in Table 4 to 40 CFR 63, Subpart AAAAA that does not include a performance test, the permittee must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration. [40 CFR 63.7130(e)(1)]
  - 2) For each compliance demonstration required in Table 6 to 40 CFR 63, Subpart AAAAA that includes a performance test conducted according to the requirements in Table 5 to 40 CFR 63, Subpart AAAAA, the permittee must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to 40 CFR 63.10(d)(2). [40 CFR 63.7130(e)(2)]
- b. Changes to the prepared and implemented written operations, maintenance, and monitoring (OM&M) plan must be submitted to the Division for review and approval. Pending approval by the field office of an initial or amended plan, the facility shall comply with the provisions of the submitted plan. Each plan must contain the following information: [40 CFR 63.7100(d)]
  - 1) Process and control device parameters to be monitored to determine compliance, along with established operating limits or ranges, as applicable, for each emission point. [40 CFR 63.7100(d)(1)]
  - 2) A monitoring schedule for each emission point. [40 CFR 63.7100(d)(2)]
  - 3) Procedures for the proper operation and maintenance of each emission unit and each air pollution control device used to meet the applicable emission limitations and operating limits in Tables 2 and 3 to 40 CFR 63, Subpart AAAAA, respectively. The OM&M plan must address periods of startup and shutdown. [40 CFR 63.7100(d)(3)]
  - 4) Procedures for the proper installation, operation, and maintenance of monitoring devices or systems used to determine compliance, including: [40 CFR 63.7100(d)(4)]



**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- i) Calibration and certification of accuracy of each monitoring device; [40 CFR 63.7100(d)(4)(i)]
  - ii) Performance and equipment specifications for the sample interface, parametric signal analyzer, and the data collection and reduction systems; [40 CFR 63.7100(d)(4)(ii)]
  - iii) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.7100(c) and 40 CFR 63.8(c)(1)(ii), (3), and (4)(ii); and [40 CFR 63.7100(d)(4)(iii)]
  - iv) Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d). [40 CFR 63.7100(d)(4)(iv)]
- 5) Procedures for monitoring process and control device parameters. [40 CFR 63.7100(d)(5)]
- 6) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the operating limits specified in Table 2 to 40 CFR 63, Subpart AAAAA, including: [40 CFR 63.7100(d)(6)]
  - i) Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and [40 CFR 63.7100(d)(6)(i)]
  - ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time and date the corrective action was completed. [40 CFR 63.7100(d)(6)(ii)]
- 7) A maintenance schedule for each emission unit and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance. [40 CFR 63.7100(d)(7)]
- c. The permittee must report each instance in which the emission points did not meet each operating limit, opacity limit, and VE limit in Tables 2, 3 and 7 to 40 CFR 63, Subpart AAAAA that applies. These deviations must be reported according to the requirements in 40 CFR 63.7131. [40 CFR 63.7121(b)]
- d. The permittee shall submit a compliance report semiannually according to the requirements in 40 CFR 63.7131(b). [40 CFR 63.7131(a); Table 8, Item 1 to 40 CFR 63, Subpart AAAAA]
- e. Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. [40 CFR 63.7131(b)(3)]
- f. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. [40 CFR 63.7131(b)(4)]
- g. The compliance report must contain the information specified in paragraphs 40 CFR 63.7131(c)(1) through (6). [40 CFR 63.7131(c)]
- h. For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and VE limit) that occurs at an affected source where the permittee is not using a CMS to comply with the emission limitations in 40 CFR 63, Subpart AAAAA, the compliance report must contain the information specified in 40 CFR 63.7131(c)(1) through (4) and 40 CFR 63.7131(d)(1) and (d)(2). The deviations must be reported in accordance

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

with the requirements in 40 CFR 63.10(d) prior to the relevant compliance date for the source as specified in 40 CFR 63.7083(g) and the requirements in 40 CFR 63.10(d)(1) through (4) beginning on the relevant compliance date for the source as specified in 40 CFR 63.7083(g). [40 CFR 63.7131(d)]

- 1) The total operating time of each emission unit during the reporting period. [40 CFR 63.7131(d)(1)]
  - 2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), and the corrective action taken. [40 CFR 63.7131(d)(2)]
  - 3) An estimate of the quantity of each regulated pollutant emitted over a non-opacity or VE emission limit, and a description of the method used to estimate the emissions. [40 CFR 63.7131(d)(3)]
- i. For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and VE limit) occurring at an affected source where the permittee is using a CMS to comply with the emission limitation in 40 CFR 63, Subpart AAAAA, the permittee must include the information specified in 40 CFR 63.7131(c)(1) through (4) and 40 CFR 63.7131(e)(1) through (12). This includes periods of startup, shutdown, and malfunction. [40 CFR 63.7131(e)]
- 1) The date and time that each malfunction started and stopped. [40 CFR 63.7131(e)(1)]
  - 2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks. [40 CFR 63.7131(e)(2)]
  - 3) The date, time and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8). [40 CFR 63.7131(e)(3)]
  - 4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period. [40 CFR 63.7131(e)(4)]
  - 5) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total affected source operating time during that reporting period. [40 CFR 63.7131(e)(5)]
  - 6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes. [40 CFR 63.7131(e)(6)]
  - 7) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total emission unit operating time during that reporting period. [40 CFR 63.7131(e)(7)]
  - 8) A brief description of the process units. [40 CFR 63.7131(e)(8)]
  - 9) A brief description of the CMS. [40 CFR 63.7131(e)(9)]
  - 10) The date of the latest CMS certification or audit. [40 CFR 63.7131(e)(10)]
  - 11) A description of any changes in CMS, processes, or controls since the last reporting period. [40 CFR 63.7131(e)(11)]
  - 12) An estimate of the quantity of each regulated pollutant emitted over a non-opacity or VE emission limit, and a description of the method used to estimate the emissions. [40 CFR 63.7131(e)(12)]
- j. Each facility that has obtained a Title V operating permit pursuant to 40 CFR 70 or 40 CFR 71 must report all deviations as defined in 40 CFR 63, Subpart AAAAA in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A) of this chapter. If the permittee submits a compliance report specified in Table 8 to 40 CFR 63,

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

Subpart AAAAA along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A) of Chapter I, and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the permittee may have to report deviations from permit requirements to the permit authority. [40 CFR 63.7131(f)]

- k. The permittee must submit semiannual compliance reports and performance reports to the U.S. EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the U.S. EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The permittee must use the appropriate electronic report template on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri>) for 40 CFR 63, Subpart AAAAA. The date report templates become available will be listed on the CEDRI website. The report must be submitted by the deadline specified in 40 CFR 63, Subpart AAAAA, regardless of the method in which the report is submitted. The U.S. EPA will make all the information submitted through CEDRI available to the public without further notice to the permittee. Do not use CEDRI to submit information claimed as Confidential Business Information (CBI). Although the Administrator does not expect persons to assert a claim of CBI, if the permittee wishes to assert a CBI claim for some of the information in the report, the permittee must submit a complete file, including information claimed to be CBI, to the U.S. EPA following the procedures in 40 CFR 63.7131(g). Clearly mark the part or all of the information that the permittee claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. The permittee must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described earlier. [40 CFR 63.7131(g)]
  - 1) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the Office of Air Quality Planning and Standards (OAQPS) CBI Office at the email address [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov), and as described above, should include clear CBI markings and be flagged to the attention of the Lime Manufacturing Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if the permittee does not have their own file sharing service, please email [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov) to request a file transfer link. [40 CFR 63.7131(g)(1)]
  - 2) If the permittee cannot transmit the file electronically, the permittee may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, P.O. Box 12055, Research Triangle Park, North Carolina 27711, Attention Lime Manufacturing Sector Lead. The mailed CBI material should be double wrapped and clearly marked.

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

Any CBI markings should not show through the outer envelope. [40 CFR 63.7131(g)(2)]

1. Within 60 days after the date of completing each performance test required by 40 CFR 63, Subpart AAAAA, the permittee must submit the results of the performance test following the procedures specified in 40 CFR 63.7131(h)(1) through (3). [40 CFR 63.7131(h)]
  - 1) Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test. Submit the results of the performance test to the EPA via CEDRI, which can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, the permittee may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. [40 CFR 63.7131(h)(1)]
  - 2) Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test. The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI. [40 CFR 63.7131(h)(2)]
  - 3) Confidential business information (CBI). [40 CFR 63.7131(h)(3)]
    - i) The EPA will make all the information submitted through CEDRI available to the public without further notice to the permittee. Do not use CEDRI to submit information the permittee claim as CBI. Although we do not expect persons to assert a claim of CBI, if the permittee wish to assert a CBI claim for some of the information submitted under 40 CFR 63.7131(a)(1) or (2), the permittee must submit a complete file, including information claimed to be CBI, to the U.S. EPA. [40 CFR 63.7131(h)(3)(i)]
    - ii) The file must be generated using the U.S. EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. [40 CFR 63.7131(h)(3)(ii)]
    - iii) Clearly mark the part or all of the information that is claimed to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. [40 CFR 63.7131(h)(3)(iii)]
    - iv) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov), and as described above, should include clear CBI markings and be flagged to the attention of the Group Leader, Measurement Policy Group. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if the permittee does not have their own file sharing service, please email [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov) to request a file transfer link. [40 CFR 63.7131(h)(3)(iv)]
    - v) If the permittee cannot transmit the file electronically, they may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, P.O. Box 12055, Research Triangle Park, North Carolina 27711, Attention Group Leader, Measurement Policy Group. The mailed CBI material should be double

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- wrapped and clearly marked. Any CBI markings should not show through the outer envelope. [40 CFR 63.7131(h)(3)(v)]
- vi) All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the U.S. EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. [40 CFR 63.7131(h)(3)(vi)]
  - vii) The permittee must submit the same file submitted to the CBI office with the CBI omitted to the U.S. EPA via the U.S. EPA's CDX as described in 40 CFR 63.7131(h)(1) and (2). [40 CFR 63.7131(h)(3)(vii)]
- m. If the permittee is required to electronically submit a report or notification through CEDRI in the EPA's CDX, the permittee may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, the permittee must meet the requirements outlined in 40 CFR 63.7131(i)(1) through (7). [40 CFR 63.7131(i)]
- 1) The permittee must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems. [40 CFR 63.7131(i)(1)]
  - 2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due. [40 CFR 63.7131(i)(2)]
  - 3) The outage may be planned or unplanned. [40 CFR 63.7131(i)(3)]
  - 4) The permittee must submit notification to the Administrator in writing as soon as possible following the date the permittee first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting. [40 CFR 63.7131(i)(4)]
  - 5) The permittee must provide to the Administrator a written description identifying: [40 CFR 63.7131(i)(5)]
    - i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable; [40 CFR 63.7131(i)(5)(i)]
    - ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage; [40 CFR 63.7131(i)(5)(ii)]
    - iii) Measures taken or to be taken to minimize the delay in reporting; and [40 CFR 63.7131(i)(5)(iii)]
    - iv) The date by which the permittee proposes to report, or if the permittee has already met the reporting requirement at the time of the notification, the date the permittee reported. [40 CFR 63.7131(i)(5)(iv)]
  - 6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator. [40 CFR 63.7131(i)(6)]
  - 7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. [40 CFR 63.7131(i)(7)]
- n. If the permittee is required to electronically submit a report through CEDRI in the EPA's CDX, the permittee may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, the permittee must meet the requirements outlined in 40 CFR 63.7131(j)(1) through (5). [40 CFR 63.7131(j)]

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- 1) The permittee may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the permittee from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage). [40 CFR 63.7131(j)(1)]
- 2) The permittee must submit notification to the Administrator in writing as soon as possible following the date the permittee first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting. [40 CFR 63.7131(j)(2)]
- 3) The permittee must provide to the Administrator: [40 CFR 63.7131(j)(3)]
  - i) A written description of the force majeure event; [40 CFR 63.7131(j)(3)(i)]
  - ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; [40 CFR 63.7131(j)(3)(ii)]
  - iii) Measures taken or to be taken to minimize the delay in reporting; and [40 CFR 63.7131(j)(3)(iii)]
  - iv) The date by which the permittee propose to report, or if the permittee has already met the reporting requirement at the time of the notification, the date the permittee reported. [40 CFR 63.7131(j)(3)(iv)]
- 4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator. [40 CFR 63.7131(j)(4)]
- 5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. [40 CFR 63.7131(j)(5)]

**7. Specific Control Equipment Operating Conditions:**

- a. The baghouse shall be operated to maintain compliance with permitted emission limitations, consistent with manufacturer's specifications and standard operating practices. [401 KAR 50:055, Section 2]
- b. Records regarding the maintenance of the dust collection system shall be maintained. [401 KAR 52:020, Section 10]

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)****ALTERNATE OPERATING SCENARIO FOR EMISSION GROUP 4****Emission Group 4: LS04 – Kiln Limestone Feed System**

EP*	Name	Capacity (tons/hr)	Construction Date
01 08	Conveyor (LS-6) & Transfer (BC-52-006) (30" x 550') [To Conveyor (LS-7 or LS-6A)]	825	1/1/1976
01 09	Conveyor (LS-6A) & Transfer (BC-52-009) (30" x 210') [To Re-Screen (52-020)]	825	
01 10	Screen (8" x 20' Single Deck) Re-Screen 52-020 & Transfer [To Conveyor (LS-7 or LSF-1)]	850	
01 11	Conveyor (LS-7) & Transfer (BC-52-007) (30" x 725') [To Conveyor (LS-9 or LS-8) or #2 Preheater (82-002)]	825	
01 13	Conveyor (LS-8) & Transfer (BC-52-007) (36" x 140') [To #1 Preheater (81-001) or #3 Preheater (83-003)]	825	
02 02	Conveyor (LS-9) & Transfer (BC-52-010) (30" x 200') [To Kiln 4]	825	1/1/1997
02 03	Kiln 4 Surge Bin Transfer [To Conveyor (LS-10)]	825	
02 04	Conveyor (LS-10) & Transfer (BC-52-011) (30" x 100') [To #4 Preheater (84-004)]	660	

**\*Controlled by Dust Suppression****APPLICABLE REGULATIONS:**

**401 KAR 63:002, Section 2(2)(ffff) 40 C.F.R. 63.7080 through 63.7143, Tables 1 through 8 (Subpart AAAAA), National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants**

**1. Operating Limitations:**

- a. Prepare and follow a written operations, maintenance, and monitoring (OM&M) plan. The plan must include items listed in 40 CFR 63.7100(d) and the corrective actions to be taken when required in Table 6 to 40 CFR 63, Subpart AAAAA. [40 CFR 63.7090(b); Table 3 to 40 CFR 63, Subpart AAAAA, Item 5]
- b. The unit must be in compliance with the emission limits and operating limits of 40 CFR 63, Subpart AAAAA at all times. The permittee may operate outside of the established operating parameter limit(s) during performance tests in order to establish new operating limits. [40 CFR 63.7100(a)]
- c. The emission points must be in compliance with the opacity and visible emission (VE) limits in 40 CFR 63, Subpart AAAAA at all times. [40 CFR 63.7100(b)]
- d. The permittee must always operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved.

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7100(c)]

**2. Emission Limitations:**

Fugitive emissions from the conveyor transfer points shall not exceed 10% opacity. [40 CFR 63.7090(a); Table 1 to 40 CFR 63, Subpart AAAAA, Item 19]

**Compliance Demonstration Method:**

Compliance shall be demonstrated through **3. Testing Requirements** a and **4. Specific Monitoring Requirements** a.

**3. Testing Requirements:**

- a. The permittee must conduct a performance test within 5 years following the initial performance test and within 5 years following each subsequent performance test thereafter from each listed emission point using U.S. EPA Reference Method 9. [40 CFR 63.7111]
- b. When determining compliance with the opacity standards for fugitive emissions from PSH operations in item 8 of Table 1 to 40 CFR 63, Subpart AAAAA, the permittee must conduct U.S. EPA Reference Method 9 according to item 17 in Table 5 to 40 CFR 63, Subpart AAAAA and in accordance with 40 CFR 63.7112(l) through (3). [40 CFR 63.7112(l)]
  - 1) The U.S. EPA Reference Method 9 in Appendix A to 40 CFR 60 test duration for each emission point must be for at least 3 hours, but the 3-hour test may be reduced to 1 hour if, during the first 1-hour period, there are no individual readings greater than 10 percent opacity and there are no more than three readings of 10 percent during the first 1-hour period. [40 CFR 63.7112(a) and Table 5 to 40 CFR 63, Subpart AAAAA, Item 17]
  - 2) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet). [40 CFR 63.7112(l)(1)]
  - 3) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun must be followed. [40 CFR 63.7112(l)(2)]
  - 4) If wet suppression is used to control PM from PSH operations, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not considered VE. When a water mist of this nature is present, emissions must be observed at a point in the plume where the mist is no longer visible. [40 CFR 63.7112(l)(3)]
- c. Each performance test must include the methods specified in rows 19 – 24 of Table 5 to 40 CFR 63, Subpart AAAAA. Each performance test must be conducted based on representative performance (i.e., performance based on normal operating conditions) of the affected source and under the specific conditions in Table 5 to 40 CFR 63, Subpart AAAAA. Representative conditions exclude periods of startup and shutdown. The permittee may not conduct performance tests during periods of malfunction. The permittee



**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the permittee shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. [40 CFR 63.7112(b)]

- d. Performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR 63.7112(b). [40 CFR 63.7112(c)]

**4. Specific Monitoring Requirements:**

- a. For each PSH operation subject to an opacity limitation as specified in Table 1 to 40 CFR 63, Subpart AAAAAA, and any vents from buildings subject to an opacity limit, the permittee must conduct a VE check according to item 1 in Table 7 to 40 CFR 63, Subpart AAAAAA, and as follows: [40 CFR 63.7121(e)]
  - 1) Conduct visual inspections that consist of a visual survey of each stack or process emission point over the test period to identify if there are VE, other than condensed water vapor. [40 CFR 63.7121(e)(1)]
  - 2) Select a position at least 15 but not more 1,320 feet from the affected emission point with the sun or other light source generally at the permittee's back. [40 CFR 63.7121(e)(2)]
  - 3) The observer conducting the VE checks need not be certified to conduct U.S. EPA Reference Method 9 but must meet the training requirements as described in U.S. EPA Reference Method 22 of appendix A-7 to 40 CFR 60. [40 CFR 63.7121(e)(3)]
  - 4) Conduct a monthly 1-minute VE check of each emission unit in accordance with 40 CFR 63.7121(e); the check must be conducted while the affected source is in operation. [Table 7 to 40 CFR 63, Subpart AAAAAA Item 1.a.(i)]
  - 5) If no VE are observed in 6 consecutive monthly checks for any emission unit, the permittee may decrease the frequency of VE checking from monthly to semi-annually for that emission unit; if VE are observed during any semiannual check, the permittee must resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks; [Table 7 to 40 CFR 63, Subpart AAAAAA Item 1.a.(ii)]
  - 6) If no VE are observed during the semiannual check for any emission unit, the permittee may decrease the frequency of VE checking from semi-annually to annually for that emission unit; if VE are observed during any annual check, the permittee must resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks; and [Table 7 to 40 CFR 63, Subpart AAAAAA Item 1.a.(iii)]
  - 7) If VE are observed during any VE check, the permittee must conduct a 6-minute test of opacity in accordance with U.S. EPA Reference Method 9 of appendix A to part 60 of this chapter; the permittee must begin the U.S. EPA Reference Method 9 test within 1 hour of any observation of VE and the 6-minute opacity reading must not exceed the applicable opacity limit. [Table 7 to 40 CFR 63, Subpart AAAAAA Item 1.a.(iv)]

**5. Specific Recordkeeping Requirements:**

- a. The permittee shall keep records as follows: [40 CFR 63.7132(a)]

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- 1) A copy of each notification and report that the permittee submitted to comply with 40 CFR 63, Subpart AAAAA, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7132(a)(1)]
- 2) Records of performance tests, performance evaluations, and opacity and VE observations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.7132(a)(3)]
- b. The permittee must keep the records in 40 CFR 63.6(h)(6) for VE observations. [40 CFR 63.7132(b)]
- c. The permittee must keep the records required by Tables 6 and 7 to 40 CFR 63, Subpart AAAAA to show continuous compliance with each emission limitation that applies to the permittee. [40 CFR 63.7132(c)]
- d. The permittee must keep which document the basis for the initial applicability determination as required under 40 CFR 63.7081. [40 CFR 63.7132(d)]
- e. Keep a log of all visual observations, any U.S. EPA Reference Method 9 and 22 tests performed, and any corrective actions taken. [401 KAR 52:020, Section 10]
- f. The permittee records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). [40 CFR 63.7133(a)]
- g. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.7133(b)]
- h. The permittee must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee may keep the records offsite for the remaining 3 years. [40 CFR 63.7133(c)]
- i. Any records required to be maintained by this part that are submitted electronically via the U.S. EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the U.S. EPA as part of an on-site compliance evaluation. [40 CFR 63.7133(d)]

**6. Specific Reporting Requirements:**

- a. After conducting a performance test, design evaluation, opacity observation, VE observation, or other initial compliance demonstration as specified in Table 4 or 5 to 40 CFR 63, Subpart AAAAA, the permittee must submit a Notification of Compliance Status following the procedure specified in 40 CFR 63.7131(h). [40 CFR 63.7130(e)]
  - 1) For each initial compliance demonstration required in Table 4 to 40 CFR 63, Subpart AAAAA that does not include a performance test, the permittee must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration. [40 CFR 63.7130(e)(1)]

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- 2) For each compliance demonstration required in Table 6 to 40 CFR 63, Subpart AAAAA that includes a performance test conducted according to the requirements in Table 5 to 40 CFR 63, Subpart AAAAA, the permittee must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to 40 CFR 63.10(d)(2). [40 CFR 63.7130(e)(2)]
- b. The permittee must submit a compliance report semiannually according to the requirements in 40 CFR 63.7131(b). [40 CFR 63.7131(a); Table 8 to 40 CFR 63, Subpart AAAAA Item 1]
- c. Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. [40 CFR 63.7131(b)(3)]
- d. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. [40 CFR 63.7131(b)(4)]
- e. The compliance report must contain the information specified in 40 CFR 63.7131(c)(1) through (6): [40 CFR 63.7131(c)]
  - 1) Company name and address. [40 CFR 63.7131(c)(1)]
  - 2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [40 CFR 63.7131(c)(2)]
  - 3) Date of report and beginning and ending dates of the reporting period. [40 CFR 63.7131(c)(3)]
  - 4) If there were no deviations from any emission limitations (emission limit, operating limit, opacity limit, and VE limit) that apply, the compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. [40 CFR 63.7131(c)(5)]
  - 5) If there were no periods during which the continuous monitoring systems (CMS) were out-of-control as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMS were out-of-control during the reporting period. [40 CFR 63.7131(c)(6)]
- f. For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and VE limit) that occurs at an affected source where the permittee is not using a CMS to comply with the emission limitations in 40 CFR 63, Subpart AAAAA, the compliance report must contain the information specified in 40 CFR 63.7131(c)(1) through (4) and 40 CFR 63.7131(d)(1) and (2). The deviations must be reported in accordance with the requirements in 40 CFR 63.10(d) prior to the relevant compliance date for the permittee's source as specified in 40 CFR 63.7083(g) and the requirements in 40 CFR 63.10(d)(1) through (4) beginning on the relevant compliance date for the permittee's source as specified in 40 CFR 63.7083(g). [40 CFR 63.7131(d)]
  - 1) The total operating time of each emission unit during the reporting period. [40 CFR 63.7131(d)(1)]

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- 2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), and the corrective action taken. [40 CFR 63.7131(d)(2)]
  - 3) An estimate of the quantity of each regulated pollutant emitted over a non-opacity or VE emission limit, and a description of the method used to estimate the emissions. [40 CFR 63.7131(d)(3)]
- g. For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and VE limit) occurring at an affected source where the permittee is using a CMS to comply with the emission limitation in 40 CFR 63, Subpart AAAAA, the permittee must include the information specified in 40 CFR 63.7131(c)(1) through (4) and 40 CFR 63.7131(e)(1) through (12). This includes periods of startup, shutdown, and malfunction. [40 CFR 63.7131(e)]
- 1) The date and time that each malfunction started and stopped. [40 CFR 63.7131(e)(1)]
  - 2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks. [40 CFR 63.7131(e)(2)]
  - 3) The date, time and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8). [40 CFR 63.7131(e)(3)]
  - 4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period. [40 CFR 63.7131(e)(4)]
  - 5) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total affected source operating time during that reporting period. [40 CFR 63.7131(e)(5)]
  - 6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes. [40 CFR 63.7131(e)(6)]
  - 7) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total emission unit operating time during that reporting period. [40 CFR 63.7131(e)(7)]
  - 8) A brief description of the process units. [40 CFR 63.7131(e)(8)]
  - 9) A brief description of the CMS. [40 CFR 63.7131(e)(9)]
  - 10) The date of the latest CMS certification or audit. [40 CFR 63.7131(e)(10)]
  - 11) A description of any changes in CMS, processes, or controls since the last reporting period. [40 CFR 63.7131(e)(11)]
  - 12) An estimate of the quantity of each regulated pollutant emitted over a non-opacity or VE emission limit, and a description of the method used to estimate the emissions. [40 CFR 63.7131(e)(12)]
- h. Each facility that has obtained a Title V operating permit pursuant to 40 CFR 70 or 40 CFR 71 must report all deviations as defined in 40 CFR 63, Subpart AAAAA in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A) of this chapter. If the permittee submits a compliance report specified in Table 8 to 40 CFR 63, Subpart AAAAA along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A) of Chapter I, and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

permittee may have to report deviations from permit requirements to the permit authority. [40 CFR 63.7131(f)]

- i. The permittee must submit semiannual compliance reports and performance reports to the U.S. EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the U.S. EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The permittee must use the appropriate electronic report template on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri>) for 40 CFR 63, Subpart AAAAA. The date report templates become available will be listed on the CEDRI website. The report must be submitted by the deadline specified in 40 CFR 63, Subpart AAAAA, regardless of the method in which the report is submitted. The U.S. EPA will make all the information submitted through CEDRI available to the public without further notice to the permittee. Do not use CEDRI to submit information claimed as Confidential Business Information (CBI). Although the Administrator does not expect persons to assert a claim of CBI, if the permittee wishes to assert a CBI claim for some of the information in the report, the permittee must submit a complete file, including information claimed to be CBI, to the U.S. EPA following the procedures in 40 CFR 63.7131(g). Clearly mark the part or all of the information that the permittee claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. The permittee must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described earlier. [40 CFR 63.7131(g)]
  - 1) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the Office of Air Quality Planning and Standards (OAQPS) CBI Office at the email address *oaqpschi@epa.gov*, and as described above, should include clear CBI markings and be flagged to the attention of the Lime Manufacturing Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if the permittee does not have their own file sharing service, please email *oaqpschi@epa.gov* to request a file transfer link. [40 CFR 63.7131(g)(1)]
  - 2) If the permittee cannot transmit the file electronically, the permittee may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, P.O. Box 12055, Research Triangle Park, North Carolina 27711, Attention Lime Manufacturing Sector Lead. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope. [40 CFR 63.7131(g)(2)]
- j. Within 60 days after the date of completing each performance test required by 40 CFR 63, Subpart AAAAA, the permittee must submit the results of the performance test following the procedures specified in 40 CFR 63.7131(h)(1) through (3): [40 CFR 63.7131(h)]

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- 1) Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test. Submit the results of the performance test to the EPA via CEDRI, which can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, the permittee may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. [40 CFR 63.7131(h)(1)]
- 2) Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test. The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI. [40 CFR 63.7131(h)(2)]
- 3) Confidential business information (CBI). [40 CFR 63.7131(h)(3)]
  - i) The EPA will make all the information submitted through CEDRI available to the public without further notice to the permittee. Do not use CEDRI to submit information the permittee claim as CBI. Although we do not expect persons to assert a claim of CBI, if the permittee wish to assert a CBI claim for some of the information submitted under 40 CFR 63.7131(a)(1) or (2), the permittee must submit a complete file, including information claimed to be CBI, to the U.S. EPA. [40 CFR 63.7131(h)(3)(i)]
  - ii) The file must be generated using the U.S. EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. [40 CFR 63.7131(h)(3)(ii)]
  - iii) Clearly mark the part or all of the information that is claimed to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. [40 CFR 63.7131(h)(3)(iii)]
  - iv) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov), and as described above, should include clear CBI markings and be flagged to the attention of the Group Leader, Measurement Policy Group. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if the permittee does not have their own file sharing service, please email [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov) to request a file transfer link. [40 CFR 63.7131(h)(3)(iv)]
  - v) If the permittee cannot transmit the file electronically, they may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, P.O. Box 12055, Research Triangle Park, North Carolina 27711, Attention Group Leader, Measurement Policy Group. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope. [40 CFR 63.7131(h)(3)(v)]
  - vi) All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the U.S. EPA is required to make emissions data available to the public. Thus, emissions data will

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- not be protected as CBI and will be made publicly available. [40 CFR 63.7131(h)(3)(vi)]
- vii) The permittee must submit the same file submitted to the CBI office with the CBI omitted to the U.S. EPA via the U.S. EPA's CDX as described in 40 CFR 63.7131(h)(1) and (2). [40 CFR 63.7131(h)(3)(vii)]
- k. If the permittee is required to electronically submit a report or notification through CEDRI in the U.S. EPA's CDX, the permittee may assert a claim of U.S. EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of U.S. EPA system outage, the permittee must meet the requirements outlined in 40 CFR 63.7131(i)(1) through (7). [40 CFR 63.7131(i)]
- 1) The permittee must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the U.S. EPA's CEDRI or CDX systems. [40 CFR 63.7131(i)(1)]
  - 2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due. [40 CFR 63.7131(i)(2)]
  - 3) The outage may be planned or unplanned. [40 CFR 63.7131(i)(3)]
  - 4) The permittee must submit notification to the Administrator in writing as soon as possible following the date the permittee first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting. [40 CFR 63.7131(i)(4)]
  - 5) The permittee must provide to the Administrator a written description identifying: [40 CFR 63.7131(i)(5)]
    - i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable; [40 CFR 63.7131(i)(5)(i)]
    - ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to U.S. EPA system outage; [40 CFR 63.7131(i)(5)(ii)]
    - iii) Measures taken or to be taken to minimize the delay in reporting; [40 CFR 63.7131(i)(5)(iii)] and
    - iv) The date by which the permittee proposes to report, or if the permittee have already met the reporting requirement at the time of the notification, the date the permittee reported. [40 CFR 63.7131(i)(5)(iv)]
  - 6) The decision to accept the claim of U.S. EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator. [40 CFR 63.7131(i)(6)]
  - 7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. [40 CFR 63.7131(i)(7)]
- l. If the permittee is required to electronically submit a report through CEDRI in the U.S. EPA's CDX, the permittee may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, the permittee must meet the requirements outlined in 40 CFR 63.7131(j)(1) through (5). [40 CFR 63.7131(j)]
- 1) The permittee may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the permittee from complying

**SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**

- with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage). [40 CFR 63.7131(j)(1)]
- 2) The permittee must submit notification to the Administrator in writing as soon as possible following the date the permittee first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting. [40 CFR 63.7131(j)(2)]
  - 3) The permittee must provide to the Administrator: [40 CFR 63.7131(j)(3)]
    - i) A written description of the force majeure event. [40 CFR 63.7131(j)(3)(i)]
    - ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event. [40 CFR 63.7131(j)(3)(ii)]
    - iii) Measures taken or to be taken to minimize the delay in reporting. [40 CFR 63.7131(j)(3)(iii)] and
    - iv) The date by which the permittee propose to report, or if the permittee have already met the reporting requirement at the time of the notification, the date the permittee reported. [40 CFR 63.7131(j)(3)(iv)]
  - 4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator. [40 CFR 63.7131(j)(4)]
  - 5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. [40 CFR 63.7131(j)(5)]

m. Refer to **Section F**.