

**AIR QUALITY DIVISION**  
**CHAPTER 6, SECTION 3**  
**OPERATING PERMIT**

**WYOMING DEPARTMENT OF**  
**ENVIRONMENTAL QUALITY**  
**AIR QUALITY DIVISION**  
122 West 25th Street  
Cheyenne, Wyoming 82002



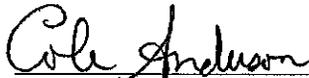
**PERMIT NO. 3-2-129**

Issue Date: **December 2, 2014**  
Expiration Date: **December 2, 2019**  
Effective Date: **December 2, 2014**  
Replaces Permit No.: **3-1-129**

In accordance with the provisions of W.S. §35-11-203 through W.S. §35-11-212 and Chapter 6, Section 3 of the Wyoming Air Quality Standards and Regulations,

**Dakota Coal Company**  
**Frannie Lime Plant**  
**Section 24, Township 58 North, Range 98 West**  
**Park County, Wyoming**

is authorized to operate a stationary source of air contaminants consisting of emission units described in this permit. The units described are subject to the terms and conditions specified in this permit. All terms and conditions of the permit are enforceable by the State of Wyoming. All terms and conditions of the permit, except those designated as not federally enforceable, are enforceable by EPA and citizens under the Act. A copy of this permit shall be kept on-site at the above named facility.

 for \_\_\_\_\_  
Steven A. Dietrich, Administrator  
Air Quality Division

12-3-2014  
Date

 \_\_\_\_\_  
Todd Parfitt, Director  
Department of Environmental Quality

12/3/2014  
Date

# WAQSR CHAPTER 6, SECTION 3 OPERATING PERMIT

## WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

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**GENERAL INFORMATION**

Company Name: Dakota Coal Company

Mailing Address: 1717 East Interstate Avenue

City: Bismarck

State: ND

Zip: 58503

Plant Name: Frannie Lime Plant

Plant Location: Section 24, Township 58 North, Range 98 West, Park County, Wyoming  
(approximately two miles north of Frannie)

Plant Mailing Address: P.O. Box 66

City: Frannie

State: WY

Zip: 82423

Name of Owner: Dakota Coal Company

Phone: (701) 557-4455

Plant Manager/Contact: Randall Banning

Phone: (307) 664-2573

DEQ Air Quality Contact: District 4 Engineer  
510 Meadowview Drive  
Lander, WY 82520

Phone: (307) 332-6755

SIC Code: 3274

Description of Process: Lime is manufactured at the plant using a single rotary-type kiln. The basic processes are calcining (lime heating) limestone and miscellaneous crushing, sizing, transfer, storage, and handling. No slaking or hydrating of lime is conducted at this plant. All lime produced at the plant is shipped as bulk lime, mostly by railcar. From the storage silos, lime is loaded into enclosed trucks and rail cars via telescoping annular loading/dust collection nozzles.

### SOURCE EMISSION POINTS

This table may not include any or all insignificant activities at this facility.

SOURCE ID#	SOURCE DESCRIPTION	SIZE	CH-6, SEC. 2 PERMITS/WAIVERS
A	Limestone Transfer System (Prior to Kiln)	350,400 TPY	None
B	Limestone Calcining System (Lime Kiln Baghouse)	187,380 TPY	OP-244, MD-222, MD-929, MD-1358*
B1	Dust Bin for Limestone Calcining System (Dust Bin Baghouse)	14,200 TPY	OP-244
C	Coal Handling and Storage System (Coal Silo Baghouse)	80,592 TPY solid fuel	MD-1358*
C1	Fuel Unloading System	80,592 TPY solid fuel	None
D	Lime Cooling System (Lime Cooler Baghouse)	187,380 TPY	OP-244
D1	Lime Quality Control and Oversize Product Handling (Oversize Product Baghouse)	65,706 TPY	AP-K97
E	Lime Crushing/Handling System (Lime Sizing Baghouse)	187,380 TPY	OP-244
F	Limestone Stockpile	3,000 ton	None

\* corrected on December 20, 2013

### TOTAL FACILITY ESTIMATED EMISSIONS

For informational purposes only. These emissions are not to be assumed as permit limits.

POLLUTANT	EMISSIONS (TPY)
<b>CRITERIA POLLUTANT EMISSIONS</b>	
Particulate Matter	38
PM <sub>10</sub> Particulate Matter	28
Sulfur Dioxide (SO <sub>2</sub> )	53
Nitrogen Oxides (NO <sub>x</sub> )	373
Carbon Monoxide (CO)	92
Volatile Organic Compounds (VOCs)	Negligible
<b>HAZARDOUS AIR POLLUTANT (HAP) EMISSIONS</b>	
	6

Emission estimates are from the operating permit application.

**FACILITY-SPECIFIC PERMIT CONDITIONS**

Facility-Wide Permit Conditions

- (F1) PERMIT SHIELD [WAQSR Ch 6, Sec 3(k)]  
 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance.

Source-Specific Permit Conditions

- (F2) FUGITIVE EMISSIONS  
 [WAQSR Ch 3, Sec 2 and Ch 6, Sec 2 Permit OP-244 and Waiver AP-K97; 40 CFR 60 Subpart 000]  
 (a) Fugitive emissions from the Oversize Product Baghouse (unit D1) shall be limited to no visible emissions.  
 (b) Fugitive emissions from affected sources subject to 40 CFR 60, Subpart 000 shall comply with the opacity limits in Table 3 to Subpart 000. On the date of permit issuance, Subpart 000 required that fugitive emissions from affected facilities that commenced construction, modification, or reconstruction between August 31, 1983 and April 22, 2008, shall not exceed 10 percent opacity.  
 (c) The permittee shall maintain all trafficked areas of the plant site as necessary to minimize fugitive dust emissions.  
 (d) The permittee shall minimize fugitive dust in compliance with standards in WAQSR Ch 3, Sec 2(f) for construction/demolition activities; storage, handling and transportation of materials; and agricultural practices.
- (F3) EMISSION LIMITS [WAQSR Ch 3, Sec 2 and Ch 6, Sec 2 Permits/Waivers OP-244, AP-K97 and MD-1358(corr); 40 CFR 60 Subparts HH and 000]  
 (a) Particulate emissions from the units listed in Table I shall not exceed the specified limits.  
 (b) NO<sub>x</sub>, CO, and SO<sub>2</sub> emissions from the Lime Kiln Baghouse (unit B) shall not exceed the limits specified in Table I of this permit.  
 (c) Visible emissions from the Coal Silo Baghouse (unit C) and Oversize Product Baghouse (unit D1) shall not exceed 7% opacity.  
 (d) Sources subject to 40 CFR 60, Subpart 000, including the sources listed in Table II (page 13) of this permit, shall meet the applicable opacity requirements in Subpart 000.  
 (e) Sources subject to 40 CFR 60, Subpart HH, including the Lime Kiln Baghouse (unit B), shall meet the applicable opacity and particulate requirements in Subpart HH.  
 (f) Visible emissions of any contaminant discharged into the atmosphere from any other single emission source shall not exhibit greater than 20 percent opacity except for one period or periods aggregating not more than six minutes in any one hour of not more than 40 percent opacity.  
 (g) The permittee shall minimize emissions from startup and shut down of the Lime Kiln Baghouse (unit B) to the extent possible as outlined in the procedures attached as Appendix A of this permit.

Table I: Emission Limits									
SOURCE	Particulate Matter			NO <sub>x</sub>		CO		SO <sub>2</sub>	
	gr/dscf	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Lime Kiln Baghouse (unit B)	0.01	3.5	15.3	85 *	372.3	21.0	92.0	12.0	52.6
Dust Bin Baghouse (unit B1)	0.01	0.21	0.9						
Coal Silo Baghouse (unit C)	0.01	0.2	0.9						
Lime Cooler Baghouse (unit D)	0.01	0.43	1.9						
Oversize Product Baghouse (unit D1)	0.01	0.4							
Lime Sizing Baghouse (unit E)	0.01	0.81	3.5						

\* based on a 24-hour block average

Testing and Monitoring Requirements

(F4) EMISSIONS TESTING [W.S. 35-11-110]

- (a) The Division reserves the right to require additional testing as provided under condition G1 of this permit. The Division shall specify the necessary test method(s) and procedure(s) prior to the test, which may include the following test methods found at 40 CFR 60, Appendix A:
- (i) For the Lime Kiln Baghouse (unit B), visible and particulate emissions shall be measured as specified by 40 CFR 60 Subpart HH §60.344.
  - (ii) For any sources subject to 40 CFR 60 Subpart OOO, visible and particulate emissions shall be measured as specified by §60.675.
  - (iii) For visible emission from other sources, Method 9.
  - (iv) For other particulate emissions, Methods 1-4 and 5.
  - (v) For SO<sub>2</sub> emissions, Methods 1-4 and 6 or 6C.
  - (vi) For NO<sub>x</sub> emissions, Methods 1-4 and 7 or 7E.
  - (vii) For CO emissions, Methods 1-4 and 10.
  - (viii) For alternative test methods, or methods used for other pollutants, the approval of the Administrator must be obtained prior to using the test method to measure emissions.
- (b) Unless otherwise specified, testing shall be conducted in accordance with WAQSR Ch 5, Sec 2(h).

(F5) LIME KILN MONITORING [WAQSR Ch 5, Sec 2; Ch 6, Sec 2 Permit MD-929; Ch 6, Sec 3(h)(i)(C)(I); Ch 7, Sec 3(c)(ii); and 40 CFR 60 Subparts A and HH]

For emissions from the Lime Kiln Baghouse (unit B), the permittee shall conduct monitoring as follows to assess compliance with the limits in conditions F3:

- (a) The permittee shall operate and maintain a continuous opacity monitoring system (COMS) meeting the requirements of WAQSR Ch 5 Sec 2 and 40 CFR 60 Subparts A and HH.
- (b) For particulate emissions, the permittee shall adhere to the compliance assurance monitoring (CAM) plan, attached as Appendix B of this permit, and shall conduct monitoring as follows during active operation of the Lime Kiln Baghouse (unit B):
- (i) The permittee shall monitor the opacity of emissions from the Lime Kiln Baghouse (unit B) with the COMS required by paragraph (a) of this permit condition.
  - (ii) An opacity measurement greater than indicated in the CAM plan shall prompt immediate inspection and corrective action.
  - (iii) In addition, the permittee shall conduct Method 22-like visual observations of the baghouse at minimum once daily, to determine the presence of visible emissions. These observations shall be conducted by a person who is educated on the general procedures for determining the presence of visible emissions but not necessarily certified to perform Method 9 observations. An excursion, which is considered observation of any visible emissions from this unit, shall prompt immediate inspection and, if appropriate, corrective action as described in the CAM plan.
  - (iv) The permittee shall inspect and maintain the baghouse in accordance with the inspection and maintenance plan attached as Appendix C.
  - (v) The permittee shall monitor for any bypass of the baghouse.
  - (vi) The permittee shall follow all other applicable requirements under conditions CAM-1 through CAM-4 of this permit.
  - (vii) The permittee shall perform particulate emissions testing in 2014 and subsequent testing at least once every three years after the previous particulate testing for comparison with the emission limits specified in condition F3, and to further refine the relationship between emissions and the indicator in the CAM plan. The permittee may reduce the frequency of subsequent tests to once every five years if the particulate emission results from the three-year performance test are less than or equal to 75 percent of the emission limits for the Lime Kiln Baghouse (unit B), as indicated in condition F3. If the results of any subsequent performance test exceed 75 percent of the particulate limit indicated above, the permittee must resume testing once every three years.
- (A) Particulate emissions shall be determined in gr/dscf and lb/hr, measured using the particulate testing methods specified in 40 CFR 60 Subpart HH §60.344.

- (B) The permittee shall measure the CAM indicators during the tests. Following each test the permittee shall evaluate the data from the test, together with data from previous testing, to determine if the indicator in the CAM plan should be revised.
  - (c) For SO<sub>2</sub> emissions, the permittee shall conduct testing at least once every five years, for comparison with the emission limits specified in condition F3. Emissions shall be measured using the EPA reference methods described in condition F4.
  - (d) For NO<sub>x</sub> emissions, the permittee shall continue to certify, maintain, and operate in-stack continuous emission monitoring (CEM) equipment in the lime kiln stack to demonstrate continuous compliance with the NO<sub>x</sub> emissions limits set forth in condition F3. The system shall meet the following requirements:
    - (i) 40 CFR 60, Appendix B, Performance Specification 2 for NO<sub>x</sub> and Performance Specification 3 for O<sub>2</sub>. In addition, the systems must demonstrate linearity in accordance with Division requirements and be certified in terms of concentration (ppm) and units of the allowable (lb/hr).
    - (ii) Quality Assurance requirements of 40 CFR 60, Appendix F. Data accuracy assessment for the purpose of maintenance and operation of the monitoring systems shall consist of one cylinder gas audit per calendar quarter for three quarters of each operating year and one relative accuracy test audit in the remaining quarter of the operating year. The permittee shall comply with the mostly recent Quality Assurance Programs for the monitoring system approved by the Division.
    - (iii) Calculate 24-hour block averages of NO<sub>x</sub> emissions in lb/hr as the arithmetic average of the previous 24 hours of one-hour averages meeting the requirements of WAQSR Ch 5, Sec 2(j). Data (and associated monitoring data hours) which do not meet the requirements of WAQSR Ch 5, Sec 2(j) shall not be included in the averages.
  - (e) For CO emissions, the permittee shall conduct testing at least once every five years, for comparison with the emission limits specified in condition F3. Emissions shall be measured using the EPA reference methods described in condition F4.
  - (f) The permittee shall monitor startup and shutdown of the Lime Kiln Baghouse (unit B) to verify adherence to the Lime Kiln Startup and Shutdown Procedures in Appendix A of this permit.
  - (g) The permittee shall monitor the monthly lime kiln fuel usage.
- (F6) ADDITIONAL MONITORING [WAQSR Ch 6, Sec 3(h)(i)(C)(I)]
- (a) The permittee shall conduct, at minimum, daily visual observations of fugitive emissions from the Limestone Transfer System (unit A), Fuel Unloading System, Oversize Product System, and any other fugitive sources that are subject to 40 CFR 60 Subpart OOO, to determine the presence of visible emissions.
    - (i) The visual observations shall be conducted by a person who is educated on the general procedures for determining the presence of visible emissions but not necessarily certified to perform Method 9 observations.
    - (ii) Observation of visible fugitive emissions shall prompt immediate inspection and, if necessary, corrective actions to eliminate the emissions.
  - (b) The permittee shall monitor dust treatment of all trafficked areas of the plant site to assure fugitive dust emissions are minimized as required by condition F2.
  - (c) The permittee shall inspect and maintain baghouse units B1, C, D, D1 and E in accordance with the inspection and maintenance plan attached as Appendix C.
    - (i) Additionally, visual observations shall be conducted on emissions from each baghouse at least once per week, by a person who is educated on the general procedures for determining the presence of visible emissions but not necessarily certified to perform Method 9 observations.
    - (ii) Observation of visible emissions shall prompt immediate inspection and, if necessary, corrective actions.
  - (d) In the event that visible emissions are observed under sections (a)(i) or (c)(i) above and the emissions are not eliminated within 24 hours, the permittee shall conduct, as soon as practicable, a test of opacity in accordance with Method 9 of 40 CFR 60, Appendix A.
    - (i) The opacity readings shall be conducted by a qualified observer certified in accordance with Section 3.1 of Method 9. For fugitive sources, monitoring shall follow the fugitive emission observation procedures of §60.675(c)(1)(i) and (ii).
    - (ii) Emissions in excess of the limits specified in condition F3 shall prompt maintenance and/or corrective actions.

- (e) The permittee shall conduct, at minimum, quarterly visual observations of the Stockpile (unit F) to determine the presence of visible emissions.
  - (i) The visual observations shall be conducted by a person who is educated on the general procedures for determining the presence of visible emissions but not necessarily certified to perform Method 9 observations.
  - (ii) Observation of visible fugitive emissions shall prompt corrective actions to eliminate the emissions.

Recordkeeping Requirements

(F7) TESTING AND MONITORING RECORDS

[WAQSR Ch 6, Sec 3(h)(i)(C)(II); Ch 6, Sec 2 Permits MD-222 and MD-929]

- (a) For any testing or monitoring required under conditions F4; F5(b)(iii) and (vii); F5(c) and (e); and F(7)(a), (c) and (e), other than Method 9 observations, the permittee shall record, as applicable, the following:
  - (i) The date, place, and time of sampling, measurements, or observations;
  - (ii) The company or entity that performed the analyses or observations;
  - (iii) The analytical techniques or methods used;
  - (iv) The results of such analyses or observations;
  - (v) The operating conditions and parameters as they existed at the time of testing, monitoring, or observation; for sources of fugitive emissions, the activities taking place during the observation and
  - (vi) any corrective actions taken.
- (b) For any Method 9 observations required by the Division under conditions F4 and F6(d), the permittee shall keep field records in accordance with Section 2.2 of Method 9.
- (c) For any Method 22 observations required by the Division under condition F5, the permittee shall keep field records in accordance with Sections 11.2 and 11.5 of Method 22.
- (d) The permittee shall comply with the recordkeeping requirements of WAQSR Ch 5, Sec 2(g) and 40 CFR 60 Subpart A for the COMS and NO<sub>x</sub> CEMS required by condition F5 for the Lime Kiln Baghouse (unit B).
  - (i) The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the lime kiln; any malfunction of the air pollution control equipment; or any periods during which the COMS or CEMS is inoperative.
  - (ii) The permittee shall maintain records of all measurements from the COMS or CEMS; performance testing measurements; COMS and CEMS performance audits and evaluations; COMS and CEMS calibration checks; and adjustments and maintenance performed on these systems or devices; recorded in a permanent form suitable for inspection.
  - (iii) Additionally, for the COMS, data shall be averaged as specified in the CAM plan attached as Appendix B. Each 1-hour average opacity value shall be recorded.
  - (iv) Additionally, for the NO<sub>x</sub> CEMS, the permittee shall determine and record each 24-hour block average NO<sub>x</sub> emissions.
- (e) For the monitoring required under condition F5(g), the permittee shall record the monthly lime kiln fuel usage.
- (f) The permittee shall record the dates and amounts of water/dust suppressant applied to trafficked areas of the plant site and any road surface maintenance performed to minimize fugitive dust from trafficked areas of the plant site.
- (g) The permittee shall retain these records on-site at the facility for a period of at least five years from the date the records are generated, and make them available to the Division upon request.

(F8) ADDITIONAL CAM RECORDS [WAQSR Ch 6, Sec 3(h)(i)(C)(II) and Ch 7, Sec 3(i)(ii)]

- (a) For the CAM required under condition F5(b), the permittee shall also maintain records of the date, time, and duration of any excursions from the indicator values specified in the CAM plan as well as the CAM indicator values during the excursion; any corrective actions taken; any written quality improvement plan required pursuant to WAQSR Ch 7, Sec 3(h), any activities undertaken to implement a Quality Improvement Plan (QIP), and other supporting information required to be maintained under WAQSR Ch 7,

Sec 3. WAQSR Ch 7, Sec 3 is available at <http://deq.state.wy.us/aqd/standards.asp>, or from the Division upon request.

- (b) The permittee shall record the date, time, and duration of any bypass of the baghouse during active operation of the lime kiln.
- (c) For the testing required by condition F5(b)(vii), the permittee shall also record the COM results and visual observations as measured during particulate sampling, as well as the evaluation of indicators as required by that condition.
- (d) The permittee shall retain these records on-site at the facility for a period of at least five years from the date the records are generated, and make them available to the Division upon request

(F9) MAINTENANCE, STARTUP AND SHUTDOWN RECORDS [WAQSR Ch 6, Sec 3(h)(i)(C)(II)]

For the lime kiln startup and shutdown procedure attached as Appendix A, and the baghouse inspection and maintenance plan attached as Appendix C, and the permittee shall:

- (a) Record the date and time of startup and shutdown of the Lime Kiln Baghouse (unit B), and an explanation of any deviation from the startup and shutdown procedures.
- (b) Maintain an inspection log for each baghouse as specified in Appendix C. Records shall include an explanation for any deviation from the inspection and maintenance plan.
- (c) The permittee shall retain these records on-site at the facility for a period of at least five years from the date the records are generated.

Reporting Requirements

(F10) TESTING AND MONITORING REPORTS [WAQSR Ch 6, Sec 3(h)(i)(C)(III), Ch 6, Sec 2 Permit MD-222]

- (a) The permittee shall report the results of the emissions tests required under conditions F4 and F5(b)(vii), (c), and (e), within 45 days of completing the tests.
  - (i) The reports shall include the information described in condition F7(a).
  - (ii) For the testing required by condition F5(b)(vii), the report shall include the evaluation of the CAM indicators required by that condition. If the evaluation indicates a CAM indicator needs to be revised, the permittee shall submit a revised CAM plan to the Division, along with a request to administratively amend this permit, within 60 days of completing the test.
- (b) The following shall be reported to the Division by January 31 and July 31 each year:
  - (i) The results of the CAM required under condition F5(b) for the Lime Kiln Baghouse (unit B), including the following:
    - (A) Summary information on the number, duration, and cause of excursions, as applicable, and the corrective actions taken;
    - (B) Summary information on the number, duration, and cause for monitor downtime or control device bypass incidents; and
    - (C) A description of the action taken to implement a QIP (if required) during the reporting period as specified in Chapter 7, Section 3 (h). Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has reduced the likelihood of similar excursions.
  - (ii) Summary results of the visible emissions monitoring required under condition F6(a), (c) and (e). Only monitoring during which visible emissions are observed and any corrective actions taken upon observing visible emissions shall be included in the report. If no visible emissions are observed during the reporting period, this shall be stated in the report.
  - (iii) Summary results of the emissions monitoring required under condition F6(d), including each opacity measurement and any corrective actions taken upon detecting noncompliance with opacity limitations.
- (c) The annual fuel usage for the lime kiln shall be reported to the Division with the annual emissions inventory required under condition G9 of this permit.
- (d) All instances of deviations from the conditions of this permit must be clearly identified in each report.
- (e) The reports shall reference this permit condition (F10) and be submitted to the Division in accordance with condition G4.

(F11) LIME KILN CONTINUOUS MONITORING SYSTEM PERFORMANCE AND EXCESS OPACITY AND NO<sub>x</sub> REPORTS [WAQSR Ch 5, Sec 2(g)(iii) and (iv); Ch 6, Sec 2 Permits MD-222 and MD-929; and 40 CFR 60 Subparts A and HH]

- (a) For visible and NO<sub>x</sub> emissions from the Lime Kiln Baghouse (unit B), the permittee shall submit excess emissions and monitoring systems performance reports (excess emissions are defined in paragraph (b) of this condition) and/or summary report forms (see paragraph (a)(vi) of this condition) to the Administrator quarterly. All reports shall be postmarked by the 30th day following the end of each calendar quarter. Written reports of excess emissions shall comply with the requirements of WAQSR Ch 5, Sec 2(g) and include the following information:
- (i) The magnitude of excess emissions computed in accordance with WAQSR Ch 5, Sec 2(j)(viii), any conversion factor(s) used, the date and time of commencement and completion of each time period of excess emissions, the nature and cause of any excess emissions, the corrective action taken or preventative measures adopted, and the process operating time during the reporting period.
  - (ii) Specific identification of each period of excess emissions that occurs during startups, shutdowns, or malfunctions of the lime kiln, the nature and cause of any malfunction, and the corrective action taken or preventative measures adopted.
  - (iii) The date and time identifying each period during which a continuous monitoring system was inoperative (except for zero and span checks), the nature and cause of monitor downtime, and the corrective action taken or preventative measures adopted.
  - (iv) When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
  - (v) For the NO<sub>x</sub> report, the results of the semiannual CEM audits required by condition F5(d).
  - (vi) One summary report form for each pollutant monitored, in a format approved by the Division.
    - (A) If the total duration of excess emissions for the reporting period is less than one percent of the total operating time for the reporting period and COMS and CEMS downtime for the reporting period is less than five percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in paragraph (b) of this condition need not be submitted unless requested by the Administrator.
    - (B) If the total duration of excess emissions for the reporting period is one percent or greater of the total operating time for the reporting period or the total COMS and CEMS downtime for the reporting period is five percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in paragraph (c) of this condition shall both be submitted.
- (b) For the purpose of reporting under this condition:
- (i) Excess opacity is defined as specified in §60.343(e).
  - (ii) Excess NO<sub>x</sub> emissions are defined as any 24-hour block average calculated as described in condition F5(d)(iii), which exceeds 85 lb/hr.
- (c) The permittee shall comply with any additional opacity reporting requirements for the Lime Kiln Baghouse (unit B) specified under 40 CFR 60 Subpart HH.
- (d) The reports shall reference this permit condition (F11) and be submitted to the Division in accordance with condition G4.

(F12) MAINTENANCE, STARTUP AND SHUTDOWN REPORTS [WAQSR Ch 6, Sec 3(h)(i)(C)(III)]

The permittee shall report to the Division by January 31 and July 31 each year:

- (a) Whether the permittee has adhered to the lime kiln startup and shutdown procedures described in Appendix A of this permit, and with the baghouse inspection and maintenance plan described in Appendix C. Any deviations from the baghouse plan or lime kiln procedure must be clearly identified in each report. If the permittee has adhered to the plan and procedure during the reporting period, this shall be stated in the report.
- (b) The reports shall reference this permit condition (F12) and be submitted to the Division in accordance with condition G4.

(F13) GREENHOUSE GAS REPORTS [W.S. 35-11-110]

The permittee shall submit to the Division a summary of any report(s) required to be submitted to the EPA under 40 CFR Part 98.

- (a) The reports shall be submitted to the Division within 60 days of submission to EPA, in a format as specified by the Division.
- (b) The reports shall be submitted in accordance with condition G4(a)(i) of this permit, to the attention of the Division's Emission Inventory Program. A copy need not be sent to the DEQ Air Quality contact.

(F14) REPORTING EXCESS EMISSIONS & DEVIATIONS FROM PERMIT REQUIREMENTS  
[WAQSR Ch 6, Sec 3(h)(i)(C)(III)]

- (a) General reporting requirements are described under the General Conditions of this permit. The Division reserves the right to require reports as provided under condition G1 of this permit.
- (b) Emissions which exceed the limits specified in this permit and which are not reported under a different condition of this permit shall be reported annually with the emission inventory unless specifically superseded by condition G17, condition G19, or other condition(s) of this permit. The probable cause of such exceedance, the duration of the exceedance, the magnitude of the exceedance, and any corrective actions or preventative measures taken shall be included in this annual report. For sources and pollutants which are not continuously monitored, if at any time emissions exceed the limits specified in this permit by 100 percent, or if a single episode of emission limit exceedance spans a period of 24 hours or more, such exceedance shall be reported to the Division within one working day of the exceedance. (Excess emissions due to an emergency shall be reported as specified in condition G17. Excess emissions due to unavoidable equipment malfunction shall be reported as specified in condition G19.)
- (c) Any other deviation from the conditions of this permit shall be reported to the Division in writing within 30 days of the deviation or discovery of the deviation.

**WAQSR CHAPTER 7, SECTION 3**  
**COMPLIANCE ASSURANCE MONITORING (CAM) REQUIREMENTS**

- (CAM-1) **COMPLIANCE ASSURANCE MONITORING REQUIREMENTS [WAQSR Ch 7, Sec 3(b) and (c)]**  
The permittee shall follow the CAM plan attached as Appendix B of this permit and meet all CAM requirements of WAQSR Chapter 7, Section 3 as they apply to the Lime Kiln Baghouse (unit B). Compliance with the source specific monitoring, recordkeeping, and reporting requirements of this permit meets the monitoring, recordkeeping, and reporting requirements of WAQSR Ch 7, Sec 3, except for additional requirements specified under conditions CAM-2 through CAM-4.
- (CAM-2) **OPERATION OF APPROVED MONITORING [WAQSR Ch 7, Sec 3(g)]**
- (a) At all times, the permittee shall maintain the monitoring under this section, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
  - (b) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities, the permittee shall conduct all monitoring in continuous operation (or at all required intervals) at all times that the pollutant specific emissions unit is operating.
  - (c) Upon detecting an excursion, the permittee shall restore operation of the pollutant-specific emission unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices. The response shall include minimizing the period of any start-up, shutdown or malfunction and taking any corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion.
  - (d) If the permittee identifies a failure to achieve compliance with an emission limit for which the monitoring did not provide an indication of an excursion while providing valid data, or the results of compliance or performance testing documents a need to modify the existing indicator ranges, the permittee shall promptly notify the Division and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes.
- (CAM-3) **QUALITY IMPROVEMENT PLAN (QIP) REQUIREMENTS [WAQSR Ch 7, Sec 3(h)]**
- (a) If the Division or the EPA Administrator determines, based on available information, that the permittee has used unacceptable procedures in response to an excursion or exceedance, the permittee may be required to develop and implement a Quality Improvement Plan (QIP).
  - (b) If required, the permittee shall maintain a written Quality Improvement Plan (QIP) and have it available for inspection.
  - (c) The plan shall include procedures for conducting one or more of the following:
    - (i) Improved preventative maintenance practices.
    - (ii) Process operation changes.
    - (iii) Appropriate improvements to control methods.
    - (iv) Other steps appropriate to correct control.
    - (v) More frequent or improved monitoring (in conjunction with (i) - (iv) above).
  - (d) If a QIP is required, the permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the Division if the period for completing the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
  - (e) Following implementation of a QIP, upon any subsequent determination under paragraph (a) above, the Division may require the permittee to make reasonable changes to the QIP if the QIP failed to address the cause of control device problems, or failed to provide adequate procedures for correcting control device problems as expeditiously as practicable.
  - (f) Implementation of a QIP shall not excuse the permittee from compliance with any existing emission limit(s) or any existing monitoring, testing, reporting, or recordkeeping requirements that may be applicable to the facility.
- (CAM-4) **SAVINGS PROVISIONS [WAQSR Ch 7, Sec 3(j)]**  
Nothing in the CAM regulations shall excuse the permittee from compliance with any existing emission limit or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may be applicable to the facility.

**WAQSR CHAPTER 5, SECTION 2 NEW SOURCE PERFORMANCE STANDARDS (NSPS) & 40 CFR 60**

**SUBPART HH REQUIREMENTS FOR LIME MANUFACTURING PLANTS**

SUBPART HH REQUIREMENTS [40 CFR 60, Subparts A and HH; WAQSR Ch 5, Sec 2; Ch 6, Sec 2 Permit OP-244]  
The permittee shall meet all requirements of 40 CFR 60 Subparts A and HH and WAQSR Ch 5, Sec 2 as they apply to rotary lime kilns used in the manufacture of lime as defined in §60.340, including the Lime Kiln Baghouse (unit B).

**SUBPART OOO REQUIREMENTS FOR NONMETALLIC MINERAL PROCESSING PLANTS**

SUBPART OOO REQUIREMENTS [40 CFR 60 Subparts A and OOO; WAQSR Ch 5, Sec 2; Ch 6, Sec 2 Permit OP-244]  
The permittee shall meet all applicable requirements of 40 CFR 60 Subparts A and OOO and WAQSR Ch 5, Sec 2 as they apply to affected facilities in fixed or portable nonmetallic mineral processing plants (each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, and enclosed truck or railcar loading station that commenced construction, modification, or reconstruction after August 31, 1983), as defined under §60.670, including the sources listed below. According to information submitted by the permittee in their permit application, all affected facilities at the Frannie Lime Plant commenced construction, modification, or reconstruction before April 22, 2008.

<b>SOURCE ID</b>	<b>SOURCE DESCRIPTION</b>	<b>SOURCE ID</b>	<b>SOURCE DESCRIPTION</b>
A	Limestone Transfer System*	D1	Oversize Product (Baghouse)
B1	Dust Bin (Baghouse)	E	Lime Sizing (Baghouse)
D	Lime Cooling (Baghouse)		

\* Truck dumping operations meeting the exemption allowed by Subpart OOO in §60.672(d) are not subject to particulate or opacity standards under Subpart OOO. They are subject to the opacity standards under WAQSR Ch 3 Sec 2, specified in condition F3(f) of this permit.

The subparts are available at <http://www.gpoaccess.gov/cfr/retrieve.html>, or from the Division upon request.

## COMPLIANCE CERTIFICATION AND SCHEDULE

### Compliance Certification [WAQSR Ch 6, Sec 3(h)(iii)(E)]

- (C1) (a) The permittee shall submit by January 31 each year a certification addressing compliance with the requirements of this permit. The certification shall be submitted as a stand-alone document separate from any monitoring reports required under this permit.
- (b) (i) For fugitive emissions from the trafficked areas of the plant site, the permittee shall assess compliance with condition F2(c) by reviewing the records kept in accordance with condition F7(e).
- (ii) For fugitive emissions from other areas of the facility, the permittee shall assess compliance with condition F2 by conducting the monitoring required by condition F6.
- (iii) For visible and particulate emissions from sources at the site other than the Lime Kiln Baghouse (unit B), the permittee shall assess compliance with condition F3 by conducting the monitoring and maintenance required by condition F6.
- (iv) For visible and particulate emissions from the Lime Kiln Baghouse (unit B), the permittee shall assess compliance with condition F3 by conducting the monitoring, testing and maintenance required by condition F5(a) and (b).
- (v) For SO<sub>2</sub>, NO<sub>x</sub>, and CO emissions from the Lime Kiln Baghouse (unit B), the permittee shall assess compliance with condition F3 by conducting the testing and monitoring required by condition F5(c), (d), and (e).
- (vi) For minimizing emissions from startup and shut down of the lime kiln, the permittee shall assess compliance with condition F3(g) by reviewing the records kept in accordance with condition F9(a).
- (vii) For lime kiln fuel usage, the permittee shall verify that records were kept in accordance with condition F7(d), and that reports were submitted in accordance with condition F10(c).
- (viii) For greenhouse gas reporting, the permittee shall assess compliance with condition F13 by verifying that reports were submitted in accordance with condition F13(b).
- (ix) For the Lime Kiln Baghouse (unit B), the permittee shall assess compliance with 40 CFR 60 Subpart HH by conducting any testing or monitoring required by §60.343.
- (x) For any unit subject to 40 CFR 60 Subpart OOO, the permittee shall assess compliance with Subpart OOO by conducting any testing and monitoring required by §§60.674 and 60.675.
- (c) The compliance certification shall include:
- (i) The permit condition or applicable requirement that is the basis of the certification;
- (ii) The current compliance status;
- (iii) Whether compliance was continuous or intermittent; and
- (iv) The methods used for determining compliance.
- (d) For any permit conditions or applicable requirements for which the source is not in compliance, the permittee shall submit with the compliance certification a proposed compliance plan and schedule for Division approval.
- (e) The compliance certification shall be submitted to the Division in accordance with condition G4 of this permit and to the Assistant Regional Administrator, Office of Enforcement, Compliance, and Environmental Justice (8ENF-T), U.S. EPA - Region VIII, 1595 Wynkoop Street, Denver, CO 80202-1129.
- (f) Determinations of compliance or violations of this permit are not restricted to the monitoring requirements listed in paragraph (b) of this condition; other credible evidence may be used.

### Compliance Schedule [WAQSR Ch 6, Sec 3(h)(iii)(C) and (D)]

- (C2) The permittee shall continue to comply with the applicable requirements with which the permittee has certified that it is already in compliance.
- (C3) The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit.

## GENERAL PERMIT CONDITIONS

### Powers of the Administrator: [W.S. 35-11-110]

- (G1) (a) The Administrator may require the owner or operator of any point source to complete plans and specifications for any application for a permit required by the Wyoming Environmental Quality Act or regulations made pursuant thereto and require the submission of such reports regarding actual or potential violations of the Wyoming Environmental Quality Act or regulations thereunder.
- (b) The Administrator may require the owner or operator of any point source to establish and maintain records; make reports; install, use and maintain monitoring equipment or methods; sample emissions, or provide such other information as may be reasonably required and specified.

### Permit Renewal and Expiration: [WAQSR Ch 6, Sec 3(c)(i)(C), (d)(ii), (d)(iv)(B), and (h)(i)(B)] [W.S. 35-11-206(f)]

- (G2) This permit is issued for a fixed term of five years. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted at least six months prior to the date of permit expiration. If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit is not a violation of WAQSR Chapter 6, Section 3 until the Division takes final action on the renewal application. This protection shall cease to apply after a completeness determination if the applicant fails to submit by the deadline specified in writing by the Division any additional information identified as being needed to process the application.

### Duty to Supplement: [WAQSR Ch 6, Sec 3(c)(iii)]

- (G3) 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. The permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after this permit is issued.

### Submissions: [WAQSR Ch 6, Sec 3(c)(iv)] [W.S. 35-11-206(c)]

- (G4) Any document submitted shall be certified as being true, accurate, and complete by a responsible official.
- (a) Submissions to the Division.
- (i) Any submissions to the Division including reports, certifications, and emission inventories required under this permit shall be submitted as separate, stand-alone documents and shall be sent to:  
Administrator, Air Quality Division  
122 West 25th Street  
Cheyenne, Wyoming 82002
- (ii) Unless otherwise noted elsewhere in this permit, a copy of each submission to the Administrator under paragraph (a)(i) of this condition shall be sent to the DEQ Air Quality Contact listed on page 3 of this permit.
- (b) Submissions to EPA.
- (i) Each certification required under condition C1 of this permit shall also be sent to:  
Assistant Regional Administrator  
Office of Enforcement, Compliance, and Environmental Justice (8ENFT)  
U.S. EPA - Region VIII  
1595 Wynkoop Street  
Denver, CO 80202-1129.
- (ii) All other required submissions to EPA shall be sent to:  
Office of Partnerships and Regulatory Assistance  
Air and Radiation Program (8P-AR)  
U.S. EPA - Region VIII  
1595 Wynkoop Street  
Denver, CO 80202-1129

Changes for Which No Permit Revision Is Required: [WAQSR Ch 6, Sec 3(d)(iii)]

- (G5) The permittee may change operations without a permit revision provided that:
- (a) The change is not a modification under any provision of title I of the Clean Air Act;
  - (b) The change has met the requirements of Chapter 6, Section 2 of the WAQSR and is not a modification under Chapter 5, Section 2 or Chapter 6, Section 4 of the WAQSR and the changes do not exceed the emissions allowed under the permit (whether expressed therein as a rate of emissions or in terms of total emissions); and
  - (c) The permittee provides EPA and the Division with written notification at least 14 days in advance of the proposed change. The permittee, EPA, and the Division shall attach such notice to their copy of the relevant permit. For each such change, the written notification required shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The permit shield, if one exists for this permit, shall not apply to any such change made.

Transfer of Ownership or Operation: [WAQSR Ch 6, Sec 3(d)(v)(A)(IV)]

- (G6) A change in ownership or operational control of this facility is treated as an administrative permit 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 Division.

Reopening for Cause: [WAQSR Ch 6, Sec 3(d)(vii)] [W.S. 35-11-206(f)(ii) and (iv)]

- (G7) The Division will reopen and revise this permit as necessary to remedy deficiencies in the following circumstances:
- (a) Additional applicable requirements under the Clean Air Act or the WAQSR that become applicable to this source if the remaining permit term is three or more years. Such reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended.
  - (b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit.
  - (c) The Division or 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.
  - (d) The Division or EPA determines that the permit must be revised or revoked to assure compliance with applicable requirements.

Annual Fee Payment: [WAQSR Ch 6, Sec 3(f)(i), (ii), and (vi)] [W.S. 35-11-211]

- (G8) The permittee shall, as a condition of continued operations, submit an annual fee to the Division as established in Chapter 6, Section 3 (f) of the WAQSR. The Division shall give written notice of the amount of fee to be assessed and the basis for such fee assessment annually. The assessed fee is due on receipt of the notice unless the fee assessment is appealed pursuant to W.S. 35-11-211(d). If any part of the fee assessment is not appealed it shall be paid to the Division on receipt of the written notice. Any remaining fee which may be due after completion of the appeal is immediately due and payable upon issuance of the Council's decision. Failure to pay fees owed the Division is a violation of Chapter 6, Section 3 (f) and W.S. 35-11-203 and may be cause for the revocation of this permit.

Annual Emissions Inventories: [WAQSR Ch 6, Sec 3(f)(v)(G)]

- (G9) The permittee shall submit an annual emission inventory for this facility to the Division for fee assessment and compliance determinations within 60 days following the end of the calendar year. The emissions inventory shall be in a format specified by the Division.

Severability Clause: [WAQSR Ch 6, Sec 3(h)(i)(E)]

- (G10) The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

Compliance: [WAQSR Ch 6, Sec 3(h)(i)(F)(I) and (II)] [W.S. 35-11-203(b)]

- (G11) The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Air Act, Article 2 of the Wyoming Environmental Quality Act, and the WAQSR and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

Permit Actions: [WAQSR Ch 6, Sec 3(h)(i)(F)(III)] [W.S. 35-11-206(f)]

- (G12) This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Property Rights: [WAQSR Ch 6, Sec 3(h)(i)(F)(IV)]

- (G13) This permit does not convey any property rights of any sort, or any exclusive privilege.

Duty to Provide Information: [WAQSR Ch 6, Sec 3(h)(i)(F)(V)]

- (G14) The permittee shall furnish to the Division, within a reasonable time, any information that the Division may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Division copies of records required to be kept by the permit, including information claimed and shown to be confidential under W.S. 35-11-1101 (a) of the Wyoming Environmental Quality Act. Upon request by the Division, the permittee shall also furnish confidential information directly to EPA along with a claim of confidentiality.

Emissions Trading: [WAQSR Ch 6, Sec 3(h)(i)(H)]

- (G15) No permit revision is required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

Inspection and Entry: [WAQSR Ch 6, Sec 3(h)(iii)(B)] [W.S. 35-11-206(c)]

- (G16) Authorized representatives of the Division, upon presentation of credentials and other documents as may be required by law, shall be given permission to:
- (a) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
  - (b) have access to and copy at reasonable times any records that must be kept under the conditions of this permit;
  - (c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
  - (d) sample or monitor any substances or parameters at any location, during operating hours, for the purpose of assuring compliance with this permit or applicable requirements.

Excess Emissions Due to an Emergency: [WAQSR Ch 6, Sec 3(l)]

- (G17) The permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency, as defined in Ch 6, Sec 3(l)(i) of the WAQSR. To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:
- (a) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
  - (b) the permitted facility was, at the time, being properly operated;
  - (c) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit;

- (d) The permittee submitted notice of the emergency to the Division within one working day of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

Diluting and Concealing Emissions: [WAQSR Ch 1, Sec 4]

- (G18) No person shall cause or permit the installation or use of any device, contrivance, or operational schedule which, without resulting in reduction of the total amount of air contaminant released to the atmosphere, shall dilute or conceal an emission from a source. This condition shall not apply to the control of odors.

Unavoidable Equipment Malfunction: [WAQSR Ch 1, Sec 5]

- (G19) (a) Any source believing that any emissions in excess of established regulation limits or standards resulted from an unavoidable equipment malfunction, shall notify the Division within 24 hours of the incident via telephone, electronic mail, fax, or other similar method. A detailed description of the circumstances of the incident as described in paragraph 5(a)(i)(A) Chapter 1, including a corrective program directed at preventing future such incidents, must be submitted within 14 days of the onset of the incident. The Administrator may extend this 14-day time period for cause.
- (b) The burden of proof is on the owner or operator of the source to provide sufficient information to demonstrate that an unavoidable equipment malfunction occurred.

Fugitive Dust: [WAQSR Ch 3, Sec 2(f)]

- (G20) The permittee shall minimize fugitive dust in compliance with standards in Ch 3, Sec 2(f) of WAQSR for construction/demolition activities, handling and transportation of materials and agricultural practices.

Carbon Monoxide: [WAQSR Ch 3, Sec 5]

- (G21) The emission of carbon monoxide in stack gases from any stationary source shall be limited as may be necessary to prevent ambient standards from being exceeded.

Asbestos: [WAQSR Ch 3, Sec 8]

- (G22) The permittee shall comply with emission standards for asbestos during abatement, demolition, renovation, manufacturing, spraying and fabricating activities.
- (a) No owner or operator shall build, erect, install, or use any article, machine, equipment, process, or method, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous dilutants to achieve compliance with a visible emissions standard, and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specified size.
- (b) All owners and operators conducting an asbestos abatement project, including an abatement project on a residential building, shall be responsible for complying with Federal requirements and State standards for packaging, transportation, and delivery to an approved waste disposal facility as provided in paragraph (m) of Ch 3, Sec 8.
- (c) The permittee shall follow State and Federal standards for any demolition and renovation activities conducted at this facility, including:
- (i) A thorough inspection of the affected facility or part of the facility where the demolition or renovation activity will occur shall be conducted to determine the presence of asbestos, including Category I and Category II non-friable asbestos containing material. The results of the inspection will determine which notification and asbestos abatement procedures are applicable to the activity.
- (ii) The owner or operator shall follow the appropriate notification requirements of Ch 3, Sec 8(i)(ii).
- (iii) The owner or operator shall follow the appropriate procedures for asbestos emissions control, as specified in Chapter 3, Section 8(i)(iii).
- (d) No owner or operator of a facility may install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. The provisions of this paragraph do not apply to spray-applied insulating materials regulated under paragraph (j) of Ch 3, Sec 8.
- (e) The permittee shall comply with all other requirements of WAQSR Ch 3, Sec 8.

Open Burning Restrictions: [WAQSR Ch 10, Sec 2]

- (G23) The permittee conducting an open burn shall comply with all rules and regulations of the Wyoming Department of Environmental Quality, Division of Air Quality, and with the Wyoming Environmental Quality Act.
- (a) No person shall burn prohibited materials using an open burning method, except as may be authorized by permit. ***“Prohibited materials”*** means substances including, but not limited to; natural or synthetic rubber products, including tires; waste petroleum products, such as oil or used oil filters; insulated wire; plastic products, including polyvinyl chloride (“PVC”) pipe, tubing and connectors; tar, asphalt, asphalt shingles, or tar paper; railroad ties; wood, wood waste, or lumber that is painted or chemically treated; explosives or ammunition; batteries; hazardous waste products; asbestos or asbestos containing materials; or materials which cause dense smoke discharges, excluding refuse and flaring associated with oil and gas well testing, completions and well workovers.
- (b) No person or organization shall conduct or cause or permit open burning for the disposal of trade wastes, for a salvage operation, for the destruction of fire hazards if so designated by a jurisdictional fire authority, or for firefighting training, except when it can be shown by a person or organization that such open burning is absolutely necessary and in the public interest. Any person or organization intending to engage in such open burning shall file a request to do so with the Division.

Sulfur Dioxide Emission Trading and Inventory Program [WAQSR Ch 14]

- (G24) Any BART (Best Available Retrofit Technology) eligible facility, or facility which has actual emissions of SO<sub>2</sub> greater than 100 tpy in calendar year 2000 or any subsequent year, shall comply with the applicable requirements of WAQSR Ch 14, Sections 1 through 3, with the exceptions described in sections 2(c) and 3(a).

Stratospheric Ozone Protection Requirements: [40 CFR Part 82]

- (G25) The permittee shall comply with all applicable Stratospheric Ozone Protection Requirements, including but not limited to:
- (a) *Standards for Appliances* [40 CFR Part 82, Subpart F]  
The permittee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F - Recycling and Emissions Reduction, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
- (i) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
- (ii) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
- (iii) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
- (iv) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. (“MVAC-like appliance” is defined at §82.152).
- (v) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.166.
- (vi) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- (vii) The permittee shall comply with all other requirements of Subpart F.
- (b) *Standards for Motor Vehicle Air Conditioners* [40 CFR Part 82, Subpart B]  
If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant.

**STATE ONLY PERMIT CONDITIONS**

The conditions listed in this section are State only requirements and are not federally enforceable.

Ambient Standards

(S1) The permittee shall operate the emission units described in this permit such that the following ambient standards are not exceeded:

POLLUTANT	STANDARD	CONDITION	WAQSR-CH-2, SEC
PM <sub>10</sub> particulate matter	50 micrograms per cubic meter	annual arithmetic mean	2 (a)
	150 micrograms per cubic meter	24-hr average concentration with not more than one exceedance per year	
PM <sub>2.5</sub> particulate matter	15 micrograms per cubic meter	annual arithmetic mean	2 (b)
	35 micrograms per cubic meter	98 <sup>th</sup> percentile 24-hr average concentration	
Nitrogen dioxide	53 parts per billion	annual average concentration	3
	100 parts per billion	three-year average of the annual 98 <sup>th</sup> percentile of the daily maximum 1-hr average concentration	
	0.053 parts per million	annual arithmetic mean	
Sulfur dioxide	75 parts per billion	three-year average of the annual (99 <sup>th</sup> percentile) of the daily max 1-hr average	4
	0.5 parts per million	3-hr blocks not to be exceeded more than once per calendar year	
Carbon monoxide	10 milligrams per cubic meter	max 8-hr concentration with not more than one exceedance per year	5
	40 milligrams per cubic meter	max 1-hr concentration with not more than one exceedance per year	
Ozone	0.075 parts per million	three-year average of the annual fourth-highest daily maximum 8-hr average concentration	6
Hydrogen sulfide	70 micrograms per cubic meter	½ hour average not to be exceeded more than two times per year	7
	40 micrograms per cubic meter	½ hour average not to be exceeded more than two times in any five consecutive days	
Suspended sulfate	0.25 milligrams SO <sub>3</sub> per 100 square centimeters per day	maximum annual average	8
	0.50 milligrams SO <sub>3</sub> per 100 square centimeters per day	maximum 30-day value	
Lead and its compounds	0.15 micrograms per cubic meter	maximum arithmetic 3-month mean concentration for a 3-year period	10

\*Exceedances of these standards shall be determined using the procedures in 40 CFR 50.

Hydrogen Sulfide: [WAQSR Ch 3, Sec 7]

- (S2) Any exit process gas stream containing hydrogen sulfide which is discharged to the atmosphere from any source shall be vented, incinerated, flared or otherwise disposed of in such a manner that ambient sulfur dioxide and hydrogen sulfide standards are not exceeded.

Odors: [WAQSR Ch 2, Sec 11]

- (S3) (a) The ambient air standard for odors from any source shall be limited to an odor emission at the property line which is undetectable at seven dilutions with odor free air as determined by a scentometer as manufactured by the Barnebey-Cheney Company or any other instrument, device, or technique designated by the Division as producing equivalent results. The occurrence of odors shall be measured so that at least two measurements can be made within a period of one hour, these determinations being separated by at least 15 minutes.
- (b) Odor producing materials shall be stored, transported, and handled in a manner that odors produced from such materials are confined and that accumulation of such materials resulting from spillage or other escape is prevented.

## SUMMARY OF SOURCE EMISSION LIMITS AND REQUIREMENTS

### Source ID#: A Source Description: **Limestone Transfer System**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	20 percent opacity for any sources not subject to opacity limits from Subpart OOO [F3] 10 percent opacity for activities subject to Subpart OOO.	WAQSR Ch 5, Sec 2	None	Daily visible emissions monitoring [F6]	Record visible emissions observations [F7]	Report visible emissions observations monitoring semiannually [F10]  Report excess emissions and permit deviations [F14]
Particulate	WAQSR Ch 5, Sec 2 and 40 CFR 60 Subpart A and OOO					

### Source ID#: B1, D Source Description: **Baghouses for the Limestone Calcining System and Lime Cooling System**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	7 percent opacity. 0.01 gr/dscf; lb/hr and TPY limits per Table I [F3]	WAQSR Ch 5, Sec 2 and Ch 6, Sec 2 Permit OP-244 and Waiver AP-K97	Testing if required [F4]	Weekly visible emissions monitoring, inspection log and maintenance [F6]	Record visible emissions observations [F7] Maintain inspection log [F9]	Report visible emissions observations monitoring semiannually [F10] Semiannual: maintenance log [F12] Report excess emissions and permit deviations [F14]
Particulate	WAQSR Ch 5, Sec 2 and 40 CFR 60 Subpart A and OOO					

These tables are intended only to highlight and summarize applicable requirements for each source. The corresponding permit conditions, listed in brackets, contain detailed descriptions of the compliance requirements. Compliance with the summary conditions in these tables may not be sufficient to meet permit requirements. These tables may not reflect all emission sources at this facility.

Source ID#: B Source Description: Lime Kiln Baghouse

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	0.01 gr/dscf, 3.5 lb/hr and 15.3 TPY [F3] Minimize startup and shutdown emissions [F3]	WAQSR Ch 5, Sec 2; Ch 7, Sec 3; Ch 6, Sec 2 Permits OP-244, MD-222 and MD-1358(corr)	Test every 3-5 years [F5] Additional testing if required [F4]	COMS [F5] CAM - COMS, daily visible emissions monitoring, inspection and maintenance [F5] Monitor baghouse bypass [F5] Monitor monthly fuel usage [F5]	Record any testing and monitoring results [F7] Record fuel usage [F7] Additional CAM records [F8] Record kiln startup/shutdown and baghouse maintenance [F9] Record bypass incidents [F8]	45 days: test results [F10] Report CAM semiannually [F10] Annual: report fuel usage [F10] Quarterly: COMS reports [F11] Semiannual: maintenance, startup/shutdowns [F12] Report excess emissions and permit deviations [F14]
SO <sub>2</sub>	12.0 lb/hr, 52.6 TPY [F4]	WAQSR Ch 6, Sec 2 Permit MD -1358(corr)	Test every 5 years [F5] Additional testing if required [F4]	Test every 5 years [F5]	Record any test results [F7]	45 days: report test results [F10] Report excess emissions and permit deviations [F14]
NO <sub>x</sub>	85 lb/hour based on a 24-hour block average, 372.3 TPY [F4]	WAQSR Ch 6, Sec 2 Permits MD-929 and MD -1358(corr)	Additional testing if required [F4]	CEMS [F5]	Record any test results [F7] CEMS records [F7]	45 days: test results [F10] Quarterly: CEMS reports [F10] Report excess emissions and permit deviations [F12]
CO	21.0 lb/hr, 92.0 TPY [F4]	WAQSR Ch 6, Sec 2 Permit MD -1358(corr)	Test every 5 years [F5] Additional testing if required [F4]	Test every 5 years [F5]	Record any test results [F7]	45 days: report test results [F10] Report excess emissions and permit deviations [F14]
Particulate	WAQSR Ch 5, Sec 2 and 40 CFR 60 Subpart A and HH					

These tables are intended only to highlight and summarize applicable requirements for each source. The corresponding permit conditions, listed in brackets, contain detailed descriptions of the compliance requirements. Compliance with the summary conditions in these tables may not be sufficient to meet permit requirements. These tables may not reflect all emission sources at this facility.

**Source ID#: C Source Description: Coal Silo Baghouse**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	7 percent opacity. 0.01 gr/dscf, 0.2 lb/hr and 0.9 TPY [F3]	WAQSR Ch 6, Sec 2 Permit MD -1358(corr)	Testing if required [F4]	Weekly visible emissions monitoring, and inspection and maintenance [F6]	Record visible emissions observations [F7] Maintain inspection log [F9]	Report visible emissions observations monitoring semiannually [F10]  Semiannual: maintenance report[F12]  Report excess emissions and permit deviations [F14]

**Source ID#: C1 Source Description: Fuel Unloading System**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	20 percent opacity [F3]	WAQSR Ch 3, Sec 3	Testing if required [F4]	Daily visible emissions monitoring [F6]	Record visible emissions observations [F7]	Report visible emissions observations monitoring semiannually [F10]  Report excess emissions and permit deviations [F14]

**Source ID#: D1 Source Description: Oversize Product System and Baghouse**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	No visible fugitive emissions [F2] 7 percent opacity, 0.01 gr/dscf, 0.4 lb/hr [F3]	WAQSR Ch 6, Sec 2 Waiver AP-K97	Testing if required [F4]	Daily visible emissions monitoring of fugitives [F6]  Weekly visible emissions monitoring, and inspection and maintenance [F6]	Record visible emissions observations [F7] Maintenance inspection log [F9]	Report visible emissions observations monitoring semiannually [F10]  Semiannual maintenance report [F12]  Report excess emissions and permit deviations [F14]
Particulate	WAQSR Ch 5, Sec 2 and 40 CFR 60 Subpart A and OOO					

These tables are intended only to highlight and summarize applicable requirements for each source. The corresponding permit conditions, listed in brackets, contain detailed descriptions of the compliance requirements. Compliance with the summary conditions in these tables may not be sufficient to meet permit requirements. These tables may not reflect all emission sources at this facility.

Source ID#: E Source Description: Lime Crushing/Handling System and Baghouse

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	7 percent opacity. 0.01 gr/dscf; lb/hr and TPY limits per Table I [F3]	WAQSR Ch 5, Sec 2 and Ch 6, Sec 2 Permit OP-244 and Waiver AP-K97	Testing if required [F4]	Weekly visible emissions monitoring, inspection log and maintenance [F6]	Record visible emissions observations [F7] Maintain inspection log [F9]	Report visible emissions observations monitoring semiannually [F10] Semiannual: maintenance log [F12] Report excess emissions and permit deviations [F14]
Particulate	WAQSR Ch 5, Sec 2 and 40 CFR 60 Subpart A and OOO					

Source ID#: F Source Description: Stockpile

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	Minimize fugitive dust [F2]	WAQSR Ch 3, Sec 2	None	Quarterly visible emissions monitoring [F5]	Visible emissions monitoring records [F7]	Semiannual: visible emissions monitoring report [F10] Report excess emissions and permit deviations [F14]

Source Description: Trafficked Areas

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	Maintain trafficked areas to minimize fugitive dust emissions [F2]	WAQSR Ch 6 Sec 2 Permit OP-244	None	Monitor dust treatment of trafficked areas to assure fugitive dust emissions are minimized [F6]	Record actions taken to minimize fugitive dust [F7]	Report excess emissions and permit deviations [F14]

These tables are intended only to highlight and summarize applicable requirements for each source. The corresponding permit conditions, listed in brackets, contain detailed descriptions of the compliance requirements. Compliance with the summary conditions in these tables may not be sufficient to meet permit requirements. These tables may not reflect all emission sources at this facility.

## ABBREVIATIONS

ACFM	Actual cubic feet per minute
AFRC	Air-fuel ratio controls
AQD	Air Quality Division
BACT	Best available control technology (see Definitions)
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
CO	Carbon monoxide
CO <sub>2</sub> e	Carbon dioxide equivalent
DEQ	Wyoming Department of Environmental Quality
EPA	United States Environmental Protection Agency (see Definitions)
ESP	Electrostatic Precipitator
g/hp-hr	Gram(s) per horsepower hour
gal	Gallon(s)
gr	Grain(s)
H <sub>2</sub> S	Hydrogen sulfide
HAP(s)	Hazardous air pollutant(s)
hp	Horsepower
hr	Hour(s)
lb	Pound(s)
M	Thousand
MACT	Maximum available control technology (see Definitions)
mfr	Manufacturer
mg	Milligram(s)
MM	Million
MVACs	Motor vehicle air conditioners
NMHC(s)	Non-methane hydrocarbon(s)
NO <sub>x</sub>	Oxides of nitrogen
NSCR	Non-selective catalytic reduction
O <sub>2</sub>	Oxygen
PM	Particulate matter
PM <sub>10</sub>	Particulate matter less than or equal to a nominal diameter of 10 micrometers
ppmv	Parts per million (by volume)
ppmw	Parts per million (by weight)
QIP	Quality Improvement Plan
RICE	Reciprocating internal combustion engine
SCF	Standard cubic foot (feet)
SCFD	Standard cubic foot (feet) per day
SCM	Standard cubic meter(s)
SIC	Standard Industrial Classification
SO <sub>2</sub>	Sulfur dioxide
SO <sub>x</sub>	Oxides of sulfur
TBD	To be determined
TPD	Ton(s) per day (1 ton = 2000 pounds, unless otherwise specified)
TPH	Ton(s) per hour (1 ton = 2000 pounds, unless otherwise specified)
TPY	Tons per year (1 ton = 2000 pounds, unless otherwise specified)
U.S.C.	United States Code
µg	Microgram(s)
VOC(s)	Volatile organic compound(s)
W.S.	Wyoming Statute
WAQSR	Wyoming Air Quality Standards & Regulations (see Definitions)

## DEFINITIONS

**"Act"** means the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.*

**"Administrator"** means Administrator of the Air Quality Division, Wyoming Department of Environmental Quality.

**"Applicable requirement"** means all of the following as they apply to emissions units at a source subject to Chapter 6, Section 3 of the WAQSR (including requirements with future effective compliance dates that have been promulgated or approved by the EPA or the State through rulemaking at the time of issuance of the operating permit):

- (a) Any standard or other requirement provided for in the Wyoming implementation plan approved or promulgated by EPA under title I of the Act that implements the relevant requirements of the Act, including any revisions to the plan promulgated in 40 C.F.R. Part 52;
- (b) Any standards or requirements in the WAQSR which are not a part of the approved Wyoming implementation plan and are not federally enforceable;
- (c) Any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D of the Act and including Chapter 5, Section 2 and Chapter 6, Sections 2 and 4 of the WAQSR;
- (d) Any standard or other requirement promulgated under Section 111 of the Act, including Section 111(d) and Chapter 5, Section 2 of the WAQSR;
- (e) Any standard or other requirement under Section 112 of the Act, including any requirement concerning accident prevention under Section 112(r)(7) of the Act and including any regulations promulgated by EPA and the State pursuant to Section 112 of the Act;
- (f) Any standard or other requirement of the acid rain program under title IV of the Act or the regulations promulgated thereunder;
- (g) Any requirements established pursuant to Section 504(b) or Section 114(a)(3) of the Act concerning enhanced monitoring and compliance certifications;
- (h) Any standard or other requirement governing solid waste incineration, under Section 129 of the Act;
- (i) Any standard or other requirement for consumer and commercial products, under Section 183(e) of the Act (having to do with the release of volatile organic compounds under ozone control requirements);
- (j) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under title VI of the Act, unless the EPA has determined that such requirements need not be contained in a title V permit;
- (k) Any national ambient air quality standard or increment or visibility requirement under part C of title I of the Act, but only as it would apply to temporary sources permitted pursuant to Section 504(e) of the Act; and
- (l) Any state ambient air quality standard or increment or visibility requirement of the WAQSR.
- (m) Nothing under paragraphs (A) through (L) above shall be construed as affecting the allowance program and Phase II compliance schedule under the acid rain provision of Title IV of the Act.

**"BACT" or "Best available control technology"** means an emission limitation (including a visible emission standard) based on the maximum degree of reduction of each pollutant subject to regulation under the WAQSR or regulation under the Federal Clean Air Act, which would be emitted from or which results for any proposed major emitting facility or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application or production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, he may instead prescribe a design, equipment, work practice or operational standard or combination thereof to satisfy the requirement of Best Available Control Technology. Such standard shall, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice, or operation and shall provide for compliance by means which achieve equivalent results. Application of BACT shall not

result in emissions in excess of those allowed under Chapter 5, Section 2 of the WAQSR and any other new source performance standard or national emission standards for hazardous air pollutants promulgated by EPA but not yet adopted by the state.

**"Department"** means the Wyoming Department of Environmental Quality or its Director.

**"Director"** means the Director of the Wyoming Department of Environmental Quality.

**"Division"** means the Air Quality Division of the Wyoming Department of Environmental Quality or its Administrator.

**"Emergency"** means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

**"EPA"** means the Administrator of the U.S. Environmental Protection Agency or the Administrator's designee.

**"Fuel-burning equipment"** means any furnace, boiler apparatus, stack, or appurtenances thereto used in the process of burning fuel or other combustible material for the purpose of producing heat or power by indirect heat transfer.

**"Fugitive emissions"** means those emissions which could not reasonably pass through a stack chimney, vent, or other functionally equivalent opening.

**"Insignificant activities"** means those activities which are incidental to the facility's primary business activity and which result in emissions of less than one ton per year of a regulated pollutant not included in the Section 112 (b) list of hazardous air pollutants or emissions less than 1000 pounds per year of a pollutant regulated pursuant to listing under Section 112 (b) of the Act provided, however, such emission levels of hazardous air pollutants do not exceed exemptions based on insignificant emission levels established by EPA through rulemaking for modification under Section 112 (g) of the Act.

**"MACT" or "Maximum achievable control technology"** means the maximum degree of reduction in emissions that is deemed achievable for new sources in a category or subcategory that shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator. Emission standards promulgated for existing sources in a category or subcategory may be less stringent than standards for new sources in the same category or subcategory but shall not be less stringent, and may be more stringent than:

- (a) the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emission information), excluding those sources that have, within 18 months before the emission standard is proposed or within 30 months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the lowest achievable emission rate applicable to the source category and prevailing at the time, in the category or subcategory for categories and subcategories with 30 or more sources, or
- (b) the average emission limitation achieved by the best performing five sources (for which the Administrator has or could reasonably obtain emissions information) in the category or subcategory for categories or subcategories with fewer than 30 sources.

**"Modification"** means any physical change in, or change in the method of operation of, an affected facility which increases the amount of any air pollutant (to which any state standards applies) emitted by such facility or which results in the emission of any such air pollutant not previously emitted.

**"Permittee"** means the person or entity to whom a Chapter 6, Section 3 permit is issued.

**"Potential to emit"** means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in title IV of the Act or the regulations promulgated thereunder.

**"Regulated air pollutant"** means the following:

- (a) Nitrogen oxides (NO<sub>x</sub>) or any volatile organic compound;
- (b) Any pollutant for which a national ambient air quality standard has been promulgated;
- (c) Any pollutant that is subject to any standard established in Chapter 5, Section 2 of the WAQSR or Section 111 of the Act;
- (d) Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act; or
- (e) Any pollutant subject to a standard promulgated under Section 112 or other requirements established under Section 112 of the Act, including Sections 112(g), (j), and (r) of the Act, including the following:
  - (i) Any pollutant subject to requirements under Section 112(j) of the Act. If EPA fails to promulgate a standard by the date established pursuant to Section 112(e) of the Act, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established pursuant to Section 112(e) of the Act; and
  - (ii) Any pollutant for which the requirements of Section 112(g)(2) of the Act have been met, but only with respect to the individual source subject to Section 112(g)(2) requirement.
- (f) Pollutants regulated solely under Section 112(r) of the Act are to be regulated only with respect to the requirements of Section 112(r) for permits issued under this Chapter 6, Section 3 of the WAQSR.

**"Renewal"** means the process by which a permit is reissued at the end of its term.

**"Responsible official"** means one of the following:

- (a) For a corporation:
  - (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
  - (ii) A duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
    - (A) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
    - (B) the delegation of authority to such representative is approved in advance by the Division;
- (b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- (c) For a municipality, State, Federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency; or
- (d) For affected sources:
  - (i) The designated representative or alternate designated representative in so far as actions, standards, requirements, or prohibitions under title IV of the Act or the regulations promulgated thereunder are concerned; and
  - (ii) The designated representative, alternate designated representative, or responsible official under Chapter 6, Section 3 (b)(xxvi) of the WAQSR for all other purposes under this section.

**"WAQSR"** means the Wyoming Air Quality Standards and Regulations promulgated under the Wyoming Environmental Quality Act, W.S. §35-11-101, *et seq.*



APPENDIX A  
Lime Kiln Startup And Shutdown



## Lime Kiln Startup Procedure

### Normal Preheater Kiln System Start Up

This section of Appendix H covers the cold start-up and normal operation of the kiln system. Go to step No. 20 below if continuing from the dry-out to normal production level. It is assumed that the operator has familiarized himself with the computer control system and the starting and stopping of motors and equipment. The control philosophy of the kiln system is relatively simple when the operator is familiar with the computer control section of the operating manual. The following steps are followed if the kiln is started from a completely cold condition.

1. The cooler must be filled with sized lime or limestone to a level covering the louvers. If using lime, do not fill the cooler more than 18 hours prior to firing the kiln to avoid air slaking of the lime. The cooler is filled with material to prevent the internals of the cooler from being damaged.
2. Open the lower doors on the preheater just above the preheater plungers and open the preheater tempering air dampers to 100 percent.
3. Open the smaller doors on the firing hood to provide required combustion air while heating up on fuel oil.
4. Position the large oil torch into position below the coal burner pipe.
5. Insert the small oil torch through the firing hood observation door. Start air compressor.
6. Light off the small torch and raise the kiln feed end temperature 150 deg. F/hr.
7. When the limits of the small oil torch have been reached, light off the large oil torch. Note: Torches must be closely observed to ensure they do not go out.
8. Start the burner cooling fan. The damper must be closed before the fan is started.
9. Rotate the kiln 180 deg. Every one-half hour until the kiln feed end temperature reaches 500 deg. F. After reaching 500 deg. F, the kiln should be rotated 90 deg. Every 15 minutes.
10. Start ID fan. The fan damper must be closed prior to starting the fan.
11. Close all preheater doors. Be sure preheater tempering air dampers are open.
12. When the kiln feed temperature reaches 800 deg. F, throttle back the large oil torch and start the coal mill.
13. Start mill exhaust fan. Open the mill exhaust fan damper to 40% and start feed at 0.5 tph. Continue raising the feed temperature approximately 150 deg. F/hr. Each time the feed end temperature starts to level off add 0.05 tph of coal feed.
14. With the coal fire in the kiln, it is now time to start the kiln drive to continuously rotate the kiln at a speed of 0.15 RPM.
15. At 900 deg. F set the preheater feed rate at 8 strokes per hour. Turn on the preheater hydraulic system and feed continuously at 8 strokes per hour.

16. Continue to raise the kiln temperature by adding 0.1 (1/10) ton of coal per hour. This will result in a temperature increase at the kiln feed end of approximately 100 deg. F per hour.
17. At 1000 deg. F, continue to feed 8 strokes of limestone per hour.
18. Kiln feed end temperature continues to increase.

**NOTE: REMOVE SMALL OIL TORCH AS SOON AS A STABLE FLAME CAN BE MAINTAINED WITH THE COAL AND LARGE OIL TORCH. FAILURE TO REMOVE THIS TORCH CAN RESULT IN SERIOUS DAMAGE.**

19. At 1100 deg. F, turn on the preheater selector switch and the kiln continuously at 16 strokes of limestone per hour.
20. Note that the preheater inlet temperature must be above 1500 deg. F to properly calcine the limestone. The reason for feeding limestone at this point is to prevent the firing zone from overheating.
21. Continue to add coal at a rate of 0.2 (2/10) ton every ½ hour (30 minutes).
22. Start the cooler fan with the damper closed when the kiln exhaust gas reaches 1300 deg. F. This will ensure that you will have enough air to cool poor quality lime dropping in the cooler. The cooler air flow must be increased as required to cool the lime and supply sufficient air to burn the fuel.
23. Increase the kiln exit gas temp. 100 deg. F/h. To operating temperature by increasing the coal feed rate and closing the tempering air dampers while increasing the preheater stroke rate and kiln speed accordingly to maintain a maximum L.D. fan inlet temperature of 550 deg. F.
24. The kiln speed, coal feed and preheater should be increased per the chart found in the operations manual at the end of the startup section to ensure that the minimum amount of bad lime is made during the start-up. A good rule of thumb during cold start-up is to feed enough coal to burn 8 more strokes of limestone than you are feeding. This is necessary to heat up the kiln system as well as to make good lime as soon as possible.

**Note: Normally when the preheater inlet temperature reaches 1600 deg. F, the large oil torch can be shut off and retracted; however, the coal flame should be observed after the torch is shut off to assure that it is stable. If the flame is too erratic, the torch should be relit until the system temperature is high enough to maintain a constant coal flame.**

25. Start the cooler feeders when the high level has been reached in the cooler. To determine when the proper level has been reached, turn the feeder selector switch on and observe if the cooler feeders start. If the feeders do not start repeat the start procedure every 15 minutes.
26. When the baghouse inlet temperature reaches 450 deg. F open the valves to the baghouse and close the start-up stack.

**Note:** Downstream auxiliary equipment such as screw conveyors, dust collectors, rotary airlocks, bucket elevators, etc., must be started prior to any possible flow of material to this equipment.

The lime kiln baghouse may be bypassed during startup, shutdown, and equipment malfunctions. The baghouse operating parameters are 350 to 550 degrees F. If gases fed to the baghouse are below 350 degrees F, the inlet temperature is below the acid dewpoint and the acid will degrade the bags. Temperature above 500 degrees F will burn the bags.

Means taken to reduce emissions during start-up/shutdown include entering the baghouse at 350 degrees F instead of recommended 450 degrees F; and stopping stroking the preheater as soon as practical to minimize the point source emissions.

Listing of 6-minute opacity readings for a typical startup/shutdown

Shutdown (8/12/93) Started to pull fire out of kiln at 9:14am Bypass baghouse at 1:00 am (8/13/93) OP6 = 35.1 at 2:00 am (8/13/93) OP6 = 33.5 at 5:00 am (8/13/93) OP6 = 6.4 at 7:00 am (8/13/93) Shutdown completed at 11:00 pm on 8/13/93	Startup at (8/16/93) 7:00 am Light fuel oil torches 10:30 am Startup ID Fan (baghouse bypassed) 14:36 Start stroking preheater at 70 tpd OP6 = 32.7 @ 17:05 OP6 = 32.0 @ 17:30 OP6 = 30.9 @ 18:00 OP6 = 30.2 @ 18:30 OP6 = 23.8 @ 19:30 OP6 = 24.2 @ 20:00 OP6 = 25.1 @ 20:30 OP6 = 30.4 @ 21:30 OP6 = 32.0 @ 22:14 OP6 = 32.3 @ 22:40 OP6 = 32.2 @ 23:30 OP6 = 30.8 @ 24:00 OP6 = 32.6 @ 01:00 (8/17/93) 01:15 Close baghouse bypass
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APPENDIX B  
Compliance Assurance Monitoring (CAM) Plan



Revised Compliance Assurance Monitoring Plan (January 13, 2014)

Wyoming Lime Producers  
Frannie Wyoming Lime Plant

I. Background

A. Emissions Units

Description: Rotary Kiln  
Identification: Unit No. 115 (Permit OP-30-129)  
Facility: Wyoming Lime Producers  
Frannie, Wyoming

B. Applicable Regulations, Emission Limit and Monitoring Requirements

Pollutant: Particulate Matter as PM<sub>10</sub>  
Regulation: 40 CFR 60, Subpart HH  
Emission Limits: 0.01 grains per dry standard cubic foot; 3.5 lb/hr and 15.3 tons per year  
Monitoring Requirements: Baghouse maintenance in accordance with the Preventative and Corrective Maintenance Plan and historic performance tests results [Permit OP-30-129(F6)]

C. Control Technology

Pulse-jet negative pressure baghouse operated with a closed duct capture system. The baghouse may be bypassed if necessary for safe operation during startup and shutdown.

II. Monitoring Approach

The key elements of the monitoring approach are presented in the attached table. Normal process operations will not produce conditions that adversely affect the baghouse without affecting opacity and visual emissions. Normal and regularly scheduled baghouse maintenance in accordance with the Preventative and Corrective Maintenance Plan will identify potential malfunctions and permit repair or maintenance sufficient to prevent the occurrence of a malfunction.

The baghouse can only be bypassed intentionally. Use of the bypass must be purposefully instituted. Operating logs document the use of the bypass.

III. Monitoring Approach Justification

A. Background

Wyoming Lime Producers is an industrial facility that produces lime. Lime is produced by the conversion of limestone (CaCO<sub>3</sub>) to lime (CaO) through the use of heat.

The facility has a rotary kiln that carries out this task. Once the lime is cooled, it may be crushed or screened to customer specifications. The end product is sold on bulk and is transported to the customer via rail or truck.

A more comprehensive summary of the limestone and lime manufacturing process can be found in AP-42, Sections 11.9 and 11.17, respectively.

Wyoming Lime Producers uses a baghouse to control PM<sub>10</sub> emissions from the rotary kiln. Emissions from the baghouse are limited to 0.01 grains per dry standard cubic foot (Permit OP-30-129). Limitations of 15 percent opacity and 0.6 lb of particulate emissions per ton of limestone processed are imposed on the kiln baghouse under 40 CFR 60.342 (Subpart HH).

B. Rationale for Selection of Opacity, Visual Emissions and Inspection as Performance Indicators

Operating experience has shown that a baghouse malfunction which causes non-compliance with the relevant standards results in a significant and sustained change in opacity, which is indicated by both recorded continuous opacity monitor (COMS) data and by visual observation. In addition, operating experience and periodic PM<sub>10</sub> testing have shown that regular baghouse inspections and appropriate preventative maintenance keep control equipment operating as designed.

C. Rationale for Selection of Indicator Range

2007 and 2010 PM<sub>10</sub> testing, weekly visual observations, and regular baghouse inspections and maintenance have shown that COMS measurements of less than 5 percent and the absence of visible emissions indicate proper operation of the baghouse when the baghouse is properly maintained. A summary of most recent PM<sub>10</sub> testing results and the corresponding continuous monitor data is shown below in Table 1.

Emission testing and contemporaneous COMS data suggest that opacity is related to emission rate as well as being a function of particulate size and particulate shape. Most recent test data demonstrate that the facility is well below its PM<sub>10</sub> emission limit when COMS opacity is at 5 percent (1-hour average).

Under this revised CAM Plan, an excursion is defined as a 1-hour average COMS reading of greater than 8%. An action level of 5% (1-hour average) is also noted. A COMS reading greater than the 5% action level prompts an external baghouse system inspection and appropriate corrective action. If COMS reading continues to rise above 5% the action level, a bag leak may be indicated and plans for a shutdown will be conducted to replace leaking bags. Maintenance required to return the baghouse to proper operation will be completed as soon as practicable. Planned shutdowns will be utilized to the extent practical to avoid and minimize excursions and to avoid increased emissions associated with unplanned shutdowns due to the CAM Plan.

A QIP will be developed if COMS readings greater than the defined excursion level occur more than 5% of normal operation time in any calendar year.

Table 1

Wyoming Lime Producers Frannie Plant PM <sub>10</sub> Test Results - February 15, 2007		
Test Run	Percent Opacity (1-hour average)	PM <sub>10</sub> Emission Rate (lb/hr)
Run 1 (92% capacity) <sup>1</sup>	5	0.79
Run 2 (97% capacity)	4	0.65
Run 3 (95% capacity)	4.5	0.72
Average	4.5	0.72

Wyoming Lime Producers Frannie Plant PM <sub>10</sub> Test Results - January 29, 2010		
Test Run	Percent Opacity (1-hour average)	PM <sub>10</sub> Emission Rate (lb/hr)
Run 1 (89.6% capacity) <sup>1</sup>	3.4	1.63
Run 2 (89.6% capacity)	4	0.82
Run 3 (90.2% capacity)	4	0.94
Average	3.8	1.13

<sup>1</sup>Based on capacity of 500 tons per day lime product

Monitoring Approach			
I. Indicator	Continuous Emission Monitoring	Visible Emissions	Inspection
Measurement Approach	Opacity from the kiln baghouse exhaust is measured continuously and 6-minute average readings are recorded.	EPA Reference Method 22 observations of emissions from the kiln baghouse. A 6-minute observation will be performed and recorded in a logbook by the observer.	Baghouse inspection and maintenance in accordance with the Preventive and Corrective Maintenance Plan found in Appendix A of Permit 3-128.
II. Indicator Range	Two action levels are identified. An action level is defined as any 1-hour period in which the average of 6-minute opacity values is greater than 6%. This action level triggers a visible emissions inspection (Method 22) and an external baghouse system inspection and possible corrective action if visible emissions are present. An excursion is defined as any 1-hour period in which the average of 6-minute opacity values is greater than 6%. This excursion triggers a shutdown as soon as practical and internal baghouse inspection and possible corrective action. A CIP will be developed if excursion level is exceeded greater than 9% of normal operation hours in any calendar year.	An action level is defined as the presence of visible emissions (Method 22). This excursion triggers an external baghouse system inspection.	An excursion is defined as failure to complete regularly scheduled inspections and maintenance actions defined in the Preventive and Corrective Maintenance Plan in Appendix A of Permit 3-128.
III. Performance Criteria			
A. Data Representativeness	Opacity is measured across the stack as air exits the baghouse. The minimum accuracy of the device is $\pm 3\%$ opacity.	Measurements are being made at the emission point of the kiln baghouse exhaust. No other control devices use this stack.	The kiln baghouse is inspected on a regular schedule.
B. Verification of Operational Status	N/A	N/A	N/A
C. QA/QC Practices and Criteria	The opacity monitor is calibrated and maintained in accordance with 40 CFR 60 Appendix B (PS 1).	The observer will be familiar with Method 22 and will follow Method 22-like procedures.	Qualified personnel perform inspections.
D. Monitoring Frequency	Opacity is continuously monitored and the 6-minute average opacity is recorded continuously.	Daily observation.	Once per shift inspection.
E. Data Collection Procedures	The data is recorded continuously by a data acquisition system.	Records are maintained to document daily observations.	Records are maintained to document inspections and any required maintenance.
F. Averaging Period	1-hour average of 6-minute data.	N/A	N/A

APPENDIX C  
Baghouse Inspection And Maintenance



**PREVENTIVE AND CORRECTIVE MAINTENANCE PLAN**

**BAGHOUSE INSPECTION AND MAINTENANCE**

Below is the daily lubrication and inspection log for the lime plant operators. This inspection is done at least once per twelve-hour shift. Items for which the baghouses are inspected include visible dust and air leaks, condition of vacuum lines and gauges, drive belt condition and tension, oil leaks, flashing in place, visible dust in the stack or emission point, and drains. The shift operator compares the information on pressure obtained during the inspections and if any anomaly in baghouse performance is noted, it is investigated and corrected by the maintenance personnel immediately.

Routine maintenance is performed in accordance with manufacturer's instructions, as contained in technical and operating manuals. These vary from baghouse to baghouse.

WYOMING LIME PRODUCERS FRANNIE, WY – LIME PLANT			
LUBRICATION / INSPECTION LOG			
Assistant:	Shift:	By:	Date:
DAY SHIFT		NIGHT SHIFT	
Grease Baghouse Material Handle		Inspect Baghouse #1 Material Handle	
Inspect Baghouse Airlocks		Inspect Baghouse Airlocks	
Log Baghouse Press.		Log Baghouse Press.	
Grease Dust System Material Handle		Inspect Dust System Material Handle	
Log Dustbin Pressure		Log Dustbin Baghouse Pressure	
Grease Loadout Conveyor HD, TL & LO		Inspect Loadout Conveyor HD, TL & LO	
Grease Lime Handle HD, TL & LO		Inspect Lime Handle HD, TL & LO	
Grease Roll Crusher Bearings		Grease Roll Crusher Bearings	
Clean Roll Crusher Room		Clean Roll Crusher Room	
Grease Lime Bucket Elevator HD and tail		Inspect Lime Bucket Elevator	
Grease and Inspect Lime Screen		Grease and Inspect Lime Screen	
Grease Silo Feed Fines Screw		Inspect Silo Feed Fines crew	
Inspect and Log Silo Baghouse Press.		Inspect and Log Silo Baghouse Press.	
Inspect Coal Handling System		Inspect Coal Handling System	
Log Coal Handle Baghouse Pressure		Log Coal Handle Baghouse Pressure	
Open Preheater Dribble Chutes		Open Preheater Dribble Chutes	
Clean LD Out, Silo Floors & Screen HS		Clean LD Out, Silo Floors & Screen HS	
Clean MCCs and Compressor Room		Clean MCCs and Compressor Room	
COMMENTS			

