

**CLARK COUNTY**  
**DEPARTMENT OF AIR QUALITY AND**  
**ENVIRONMENTAL MANAGEMENT**  
*500 South Grand Central Parkway, Box 555210, Las Vegas, Nevada 89155*  
**Part 70 Operating Permit**  
**Source: 3**  
Issued in accordance with the  
Clark County Air Quality Regulations (AQR)

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**ISSUED TO:      Chemical Lime Company**

**SOURCE LOCATION:**

Apex Lime Plant  
12101 North US Highway 91  
North Las Vegas, Nevada 89124  
T18S, R63E, Sections 23 and 26  
Hydrographic Basin Number: 216

**COMPANY ADDRESS:**

Raintree Corporate Center 1  
15333 North Pima Road, Suite 200  
Scottsdale, Arizona 85260

**NATURE OF BUSINESS:**

SIC Codes: 3274 – Lime Manufacturing; 1442 – Construction Sand and Gravel  
NAICS Codes: 327410 – Lime Manufacturing; 212321 – Construction Sand and Gravel

**RESPONSIBLE OFFICIAL:**

Name:            Rex Simpson  
Title:            Plant Manager  
Phone:          (702) 643-7702  
Fax Number:    (702) 643-9517

**Permit Issuance Date:      December 16, 2011    Expiration Date:      December 15, 2016**

**ISSUED BY: CLARK COUNTY DEPARTMENT OF AIR QUALITY AND ENVIRONMENTAL  
MANAGEMENT**



Tina Gingras  
Assistant Director, Clark County DAQEM

## EXECUTIVE SUMMARY

Chemical Lime Company is a manufacturer of lime and lime products. The legal description of the source location is: T18S, R63E, Sections 23 and 26 in Apex Valley, County of Clark, State of Nevada. The Apex plant is situated in hydrographic area 216 (Garnet Valley). Garnet Valley is designated as nonattainment area for 8-hour ozone (regulated through NO<sub>x</sub> and VOC) and is attainment area for PM<sub>10</sub>, CO, and SO<sub>x</sub>.

Chemical Lime Company, Apex plant, is a major source for PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, CO, SO<sub>x</sub> and HAP (HCl) and a minor source for VOC. The source is also identified as a major source for greenhouse gases. The Apex operation includes mining and excavating, limestone handling and processing, solid fuel handling, lime storage silos, fuel storage tanks, and truck and railcar loading and transporting. Four rotary lime kilns are utilized to convert limestone to quicklime. These kilns can be fired by coal, coke, or natural gas.

The following table summarizes the source PTE (in units of tons per year) for each regulated air pollutant for all emission units addressed by this Part 70 Operating Permit:

PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	HAP	Lead (Pb)
338.09	197.23	1,892.12	947.21	1,646.39	8.34	22.94	0.00

All terms and conditions in Sections I through IV and the Appendix in this permit are federally enforceable unless explicitly denoted otherwise. [AQR 12.5.2]

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**I. ACRONYMS**

**Table I-1: Acronym List**

<b>Acronym</b>	<b>Term</b>
ANFO	Ammonium Nitrate Fuel Oil
acfm	Actual Cubic Feet per Minute
AQR	Clark County Air Quality Regulations
ATC	Authority to Construct
CAAA	Clean Air Act, as amended
CEMS	Continuous Emissions Monitoring System
CFC	Chlorofluorocarbon
CFR	United States Code of Federal Regulations
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
DAQEM	Clark County Department of Air Quality & Environmental Management
DLN	Dry Low-NO <sub>x</sub>
dscfm	Dry Standard Cubic Feet per Minute
EPA	United States Environmental Protection Agency
EU	Emission Unit
FTIR	Fourier Transform Infrared Spectroscopy
HAP	Hazardous Air Pollutant
HHV	Higher Heating Value
HP	Horse Power
kW	kilowatt
MMBtu	Millions of British Thermal Units
M/N	Model Number
NAICS	North American Industry Classification System
NO <sub>x</sub>	Nitrogen Oxides
NRS	Nevada Revised Statutes
OM&M	Operations, Maintenance, and Monitoring
OP	Operating Permit
PM <sub>10</sub>	Particulate Matter less than 10 microns
ppm	Parts per Million
ppmvd	Parts per Million, Volumetric Dry
PSH	Processed Stone Handling
PTE	Potential to Emit
QA/AC	Quality Assurance/Quality Control
RATA	Relative Accuracy Test Audits
RMP	Risk Management Plan
SCC	Source Classification Codes
scf	Standard Cubic Feet
SIC	Standard Industrial Classification
SIP	State Implementation Plan
S/N	Serial Number
SO <sub>x</sub>	Sulfur Oxides
TCS	Toxic Chemical Substance
tsf	Ton of Stone Feed
VOC	Volatile Organic Compound

## II. GENERAL CONDITIONS

### A. General Requirements

1. The Permittee shall comply with all conditions of the Part 70 Operating Permit. Any permit noncompliance may constitute a violation of the AQRs, Nevada Law, and the Clean Air Act (Act) and is grounds for the following: enforcement action; permit termination, revocation and reissuance; revision; or denial of a permit renewal application. *[AQR 12.5.2.6(g)(1)]*
2. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall not be affected and shall remain valid. *[AQR 12.5.2.6(f)]*
3. The Permittee shall pay all permit fees pursuant to AQR Section 18. *[AQR 12.5.2.6(h)]*
4. The permit does not convey any property rights of any sort, or any exclusive privilege. *[AQR 12.5.2.6(g)(4)]*
5. The Permittee shall not hinder, obstruct, delay, resist, interfere with, or attempt to interfere with the Control Officer, or any individual to whom authority has been duly delegated for the performance of any duty by the AQR. *[AQR 5.1.1]*
6. The Permittee shall allow the Control officer, or an authorized representative, upon presentation of credentials and other documents as may be required by law to enter into the property, with or without prior notice, at any reasonable time, for the purpose of establishing compliance with AQR or this permit. Upon arrival at the facility, the Control Officer, or designated representative, shall check in at the main office (if arriving between the hours of 8:00 am and 5:00 pm on weekdays) or at the shipping office (if arriving at any other time). During the inspection, the Control Officer, or designated representative, shall comply with the applicable safety regulations of the Mine Safety and Health Administration, including the requirement to be escorted by the Permittee. The Permittee shall make an escort available promptly in order for the inspection to begin in a timely manner. Upon presentation of credentials, the Permittee shall allow the Control Officer: *[AQR 12.5.2.8(b), NSR – ATC/OP Modification 10, Section 1, Condition 5 (05/26/2006)]*
  - a. Have access to and copy any records that must be kept under the conditions of the permit;
  - b. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
  - c. Sample or monitor substances or parameters for the purpose of assuring compliance with the permit or applicable requirements; and
  - d. Document alleged violations using devices such as cameras or video equipment.

7. The Permittee owning, operating, or in control of any equipment or property who shall cause, permit, or participate in, any violation of the AQR shall be individually and collectively liable to any penalty or punishment imposed by and under the AQR. *[AQR 8.1]*
8. Any Permittee who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, the Permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit. A responsible official shall certify the additional information consistent with the requirements of AQR Section 12.5.2.4. *[AQR 12.5.2.2]*
9. The Permittee who has been issued a permit under Section 12.5 shall post such permit in a location which is clearly visible and accessible to the facility's employees and representatives of the department. *[AQR 12.5.2.6(m)]*

**B. Modification, Revision, Renewal Requirements**

1. No person shall begin actual construction of a New Part 70 source, or modify or reconstruct an existing Part 70 source that falls within the preconstruction review applicability criteria, without first obtaining an Authority to Construct Permit from the Control Officer *[AQR 12.4.1.1(a)]*
2. The permit may be revised, revoked, reopened and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *[AQR 12.5.2.6(g)(3)]*
3. A permit, permit revision, or renewal may be approved only if all of the following conditions have been met: *[AQR 12.5.2.10(a)]*
  - a. The Control Officer has received a complete application for a permit, permit revision, or permit renewal, except that a complete application need not be received before a Part 70 general permit is issued pursuant to Section 12.5.2.20;
  - b. Except for revisions qualifying as administrative or minor permit revisions under Section 12.5.2.13 or paragraphs (a) and (b) of Section 12.5.2.14, the Control Officer has complied with the applicable requirements for public participation in Section 12.5.2.17;
  - c. The Control Officer has complied with the requirements for notifying and responding to EPA and affected states under paragraph (b) of Section 12.5.2.18;
  - d. The conditions of the permit provide for compliance with all applicable requirements and the requirements of Section 12.5; and

- e. EPA has received a copy of the proposed permit or permit revision and any notices required under paragraphs (a) and (b) of Section 12.5.2.18, and has not objected to issuance of the permit under paragraph (c) of Section 12.5.2.18 within the time period specified therein.
4. The Permittee shall not build, erect, install or use any article, machine, equipment other contrivance, the use of which, without a reduction in the total release of air contaminants to the atmosphere reduces or conceals an emission, which would otherwise constitute a violation of an applicable requirement. *[AQR 80.1]*
5. No permit revisions shall be required under any approved economic incentives, marketable permits, emissions trading or other similar programs or processes for changes that are provided for in the permit. *[AQR 12.5.2.6(i)]*
6. Permit expiration terminates the Permittee's right to operate unless a timely and complete renewal application has been submitted. *[AQR 12.5.2.11(b)]*
7. For purposes of permit renewal, a timely application is a complete application that is submitted at least six (6) months and not greater than eighteen (18) months prior to the date of permit expiration. If a source submits a timely application under this provision, it may continue operating under its current Part 70 Operating Permit until final action is taken on its application for a renewed Part 70 Operating Permit. *[AQR 12.5.2.1(a)(2)]*

**C. Reporting/Notifications/Providing Information Requirements**

1. The Permittee shall submit all compliance certifications to the Control Officer. *[AQR 12.5.2.8(e)(4)]*
2. Any application form, report, or compliance certification submitted pursuant to the permit or AQRs shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under AQR 12.5 shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *[AQR 12.5.2.6(l)]*
3. The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by the permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the Administrator along with a claim of confidentiality. *[AQR 12.5.2.6(g)(5)]*
4. Upon request of the Control Officer, the Permittee shall provide such information or analyses as will disclose the nature, extent, quantity or degree of air contaminants which are or may be discharged by such source, and type or nature of control

equipment in use, and the Control Officer may require such disclosures be certified by a professional engineer registered in the state. In addition to such report, the Control Officer may designate an authorized agent to make an independent study and report as to the nature, extent, quantity or degree of any air contaminants which are or may be discharged from the source. An authorized agent so designated is authorized to inspect any article, machine, equipment, or other contrivance necessary to make the inspection and report. [AQR 4.4]

5. The Permittee shall submit annual emissions inventory reports based on the following: [AQR 18.6.1, AQR 12.9]
  - a. The annual emissions inventory must be submitted to DAQEM by March 31 of each calendar year; and
  - b. The report shall include the emission factors and calculations used to determine the emissions from each permitted emission unit, even when an emission unit is not operated.

The Permittee shall make all production, emission and monitoring calculations available to the Control Officer for inspection within 30 days from the end of each month. [AQR 12.5.2.8]

**D. Compliance Requirements**

1. The Permittee shall not use as a defense 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. [AQR 12.5.2.6(g)(2)]
2. Any person who violates any provision of AQR, including, but not limited to, any application requirement; any permit condition; any fee or filing requirement; any duty to allow or carry out inspection, entry or monitoring activities or any requirements by DAQEM is guilty of a civil offense and shall pay civil penalty levied by the Air Pollution Control Hearing Board and/or the Hearing Officer of not more than \$10,000. Each day of violation constitutes a separate offense. [AQR 9.1]
3. Any person aggrieved by an order issued pursuant to AQR Section 9 is entitled to review as provided in Chapter 233B of NRS. [AQR 9.12]
4. The Permittee of any stationary source or emission unit that fails to demonstrate compliance with the emissions standards or limitations shall submit a compliance schedule to the Control Officer for review no later than 90 days after adoption of such emission limitations. [AQR 10.1]
5. The Permittee shall comply with the requirements of 40 CFR 61, Subpart M, of the National Emission Standard for Asbestos for all demolition and renovation projects. [AQR 13.1(b)(8)]
6. Permittee shall certify compliance with terms and conditions contained in the Operating Permit, including emission limitations, standards, or work practices, as follows: [AQR 12.5.2.8(e)]

- a. the Permittee shall submit compliance certifications annually in writing to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) and the Administrator at USEPA Region IX (Director, Air and Toxics Divisions, 75 Hawthorne St., San Francisco, CA 94105). A compliance certification for each calendar year will be due on January 30th of the following year;
  - b. annual submission of compliance certification, or more frequently if specified in the applicable requirement or by the Control Officer;
  - c. a means for monitoring the compliance of the source with its emission limitations, standards, and work practices;
  - d. the compliance certification shall include all of the following:
    - i. the identification of each term or condition of the permit that is the basis of the certification;
    - ii. The identification of the methods or other means used by the Permittee for determining the compliance status with each term and condition during the certification period. The methods and means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements described in 40 CFR 70.6(a)(3). If necessary, the Permittee also shall identify any other material information that must be included in the certification to comply with Section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information
    - iii. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify, as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance (as defined under 40 CFR Part 64) occurred;"
    - iv. such other facts as the Control Officer may require determining the compliance status of the source.
7. The Permittee shall report to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) any upset, breakdown, malfunction, emergency or deviation which cause emissions of regulated air pollutants in excess of any limits set by regulation or by this permit. The report shall be in two parts as specified below: *[AQR 12.5.2.6(d)(4)(B) and AQR 25.6.1]*
- a. within twenty-four (24) hours of the time the Permittee learns of the excess emissions, a notification shall be provided by phone (702) 455-5942, fax (702) 383-9994, or email: [airquality@clarkcountynv.gov](mailto:airquality@clarkcountynv.gov)
  - b. within seventy-two (72) hours of the notification required by paragraph (a) above, a detailed written report, certified by a responsible official, containing the information required by AQR Section 25.6.3 shall be submitted.

8. The Permittee shall report to the Control Officer with the semi-annual monitoring report all deviations from permit conditions that do not result in excess emissions, including those attributable to malfunction, startup, or shutdown. Reports shall identify the probable cause of each deviation and any corrective actions or preventative measures taken. *[AQR 12.5.2.6(d)(4)(B)]*
9. The owner or operator of any source required to obtain a permit under Section 12 shall report to the Control Officer emissions that are in excess of an applicable requirement or emission limit that pose a potential imminent and substantial danger to public health, safety or the environment as soon as possible, but in no case later than twelve (12) hours after the deviation is discovered, with a written report submitted within two (2) days of the occurrence. *[AQR 25.6.2]*

#### **E. Performance Testing Requirements**

1. Upon request of the Control Officer, the Permittee shall test or have tests performed to determine the emissions of air contaminants from any source whenever the Control Officer has reason to believe that an emission in excess of that allowed by the DAQEM regulations is occurring. The Control Officer may specify testing methods to be used in accordance with good professional practice. The Control Officer may observe the testing. All tests shall be conducted by reputable, qualified personnel. *[AQR 4.5]*
2. Upon request of the Control Officer, the Permittee shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants. *[AQR 4.6]*
3. The Permittee shall submit for approval a performance testing protocol which contains testing, reporting, and notification schedules, test protocols, and anticipated test dates to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) not less than 45 nor more than 90 days prior to the anticipated date of the performance test. *[AQR 12.5.2.8]*
4. The Permittee shall submit to EPA for approval any alternative test methods that are not already approved by EPA, to demonstrate compliance with a requirement under 40 CFR Part 60. *[40 CFR 60.8(b)]*
5. The Permittee shall submit a report describing the results of each performance test to the Control Officer within 60 days from the end of the performance test. *[12.5.2.8]*

**III. EMISSION UNITS AND APPLICABLE REQUIREMENTS**

**A. Emission Units and PTE for PM<sub>10</sub>**

- The stationary source covered by this Part 70 OP consists of the emission units and associated appurtenances summarized in Tables III-A-1 through III-A-4. [AQR 12.5.2.6]

**Table III-A-1: List of Emission Units, Throughputs, and PTE (PM<sub>10</sub>) for Limestone Mining and Manufacturing of Lime Products**

EU	Source EU Identifier	Process Description	Throughput tons/yr	EF (lbs/ton)		PTE (tons/yr)	
				PM <sub>2.5</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>
<b>Mining Operations</b>							
Q101	N/A	Mining Ore and Removing Overburden	5,360,000	0.0015	0.0102	4.02	27.34
Q103	N/A	Blasting	80 blasts	18.09 lbs/blast	120.6 lbs/blast	0.72	4.82
<b>Limestone Processing</b>							
P103	HO-101/PF-101	Open Stone Transfer Point	2,680,000	0.000013	0.000046	0.05	0.18
	GR-101	Open Stone Transfer Point		0.000013	0.000046		
	BC-103	Closed Stone Transfer Point		0.000013	0.000046		
P103a	JC-102	Stone Crushing	1,125,600	0.00044	0.0024	0.25	1.35
P106	BC-104	Closed Stone Transfer Point	4,569,480	0.000013	0.000046	0.09	0.95
	VS-202	Stone Screening	2,284,740	0.00005	0.00074		
P107	VS-203	Stone Screening	2,284,740	0.00005	0.00074	0.05	0.84
P109	BC-204	Closed Stone Transfer Point	1,889,480	0.000013	0.000046	0.02	0.05
	BC-225		670,000	0.000013	0.000046		
P109a	CC-201	Secondary Crushing	1,889,480	0.00044	0.0024	0.42	2.27
P112	BN-226	Closed Stone Transfer Point	670,000	0.000013	0.000046	0.11	0.38
	BN-226 Loadout	Open Stone Transfer Point		0.00031	0.0011		
P114	BC-205	Closed Stone Transfer Point	730,741	0.000013	0.000046	0.03	0.92
	BC-206	Closed Stone Transfer Point	538,201	0.000013	0.000046		
	BC-207	Open Stone Transfer Point	538,201	0.000013	0.000046		
	BC-209	Closed Stone Transfer Point	1,086,719	0.000013	0.000046		
	BC-210	Open Stone Transfer Point	1,086,719	0.000013	0.000046		
P115	BC-236	Closed Stone Transfer Point	192,540	0.000013	0.000046	0.01	0.05
	BC-237	Open Stone Transfer Point	192,540	0.000013	0.000046		
	BC-208	Closed Stone Transfer Point	1,279,259	0.000013	0.000046		
	BC-235	Open Stone Transfer Point	192,540	0.000013	0.000046		
	BC-Coarse 2	Open Stone Transfer Point	192,540	0.000013	0.000046		
P129	Loader Loading (dolomite)	Open Stone Transfer Point	233,408	0.00031	0.0011	0.07	0.26
	Loader Unloading (dolomite)	Open Stone Transfer Point	233,408	0.00031	0.0011		
<b>Kiln Run Screening</b>							

EU	Source EU Identifier	Process Description	Throughput tons/yr	EF (lbs/ton)		PTE (tons/yr)	
				PM <sub>2.5</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>
R101	BC-11	Closed Stone Transfer Point (underground)	778,026	0.000013	0.000046	0.03	0.34
	BC-12	Closed Stone Transfer Point	778,026	0.000013	0.000046		
	BC-13	Closed Stone Transfer Point	778,026	0.000013	0.000046		
	VS-04	Stone Screening	778,026	0.000005	0.000074		
R106	BC-14	Closed Stone Transfer Point	38,901	0.000013	0.000046	0.01	0.02
	BN-05	Closed Stone Transfer Point	38,901	0.000013	0.000046		
	BN-05 Loadout	Open Stone Transfer Point	38,901	0.000031	0.0011		
R108	BC-15, 16	Closed Stone Transfer Point	739,125	0.000013	0.000046	0.02	0.07
	BE-01, 02	Closed Stone Transfer Point	739,125	0.000013	0.000046		
	BC-17	Closed Stone Transfer Point	739,125	0.000013	0.000046		
	BC-18	Closed Stone Transfer Point	295,650	0.000013	0.000046		
	SB-01	Closed Stone Transfer Point	221,738	0.000013	0.000046		
	SB-02	Closed Stone Transfer Point	221,738	0.000013	0.000046		
	SB-03	Closed Stone Transfer Point	295,650	0.000013	0.000046		
R117	BC-217	Closed Stone Transfer Point	534,375	0.000013	0.000046	0.03	0.42
	BC-224	Closed Stone Transfer Point	534,375	0.000013	0.000046		
	VS-229	Stone Screening	1,068,750	0.000005	0.000074		
R120a	BC-231	Closed Stone Transfer Point	106,875	0.000013	0.000046	0.01	0.01
R120	BC-230	Closed Stone Transfer Point	961,875	0.000013	0.000046	0.01	0.04
	SB-04	Closed Stone Transfer Point	961,875	0.000013	0.000046		
<b>Kiln 1</b>							
K102	PH-01	Closed Stone Transfer Point	221,738	See Table III-A-2 Baghouse DC-01		25.83	25.83
	KN-01; 81.25 MMBtu/hr	Rotary Kiln 1	109,500				
	CO-01	Cooler	109,500				
K102a	Auxiliary Kiln Drive; Isuzu	49 hp Diesel Engine	500 hrs.	0.0013 lbs-hp/hr		0.02	0.02
K104	SC-01	Lime Transfer	109,500	See Table III-A-2 Baghouse DC-20		5.41	7.62
	SC-02	Lime Transfer	109,500				
	BE-03	Lime Transfer	109,500				
K106	BN-06	Bin Feeding	8,760	0.000031	0.0011	0.14	0.94
	BN-06	Load Out	8,760	0.0323	0.2135		
K110	SC-04 (sealed)	Dust Transfer	3,285	0.000031	0.0011	0.01	0.02
	SC-05 (sealed)	Dust Transfer	3,285	0.000031	0.0011		
	SC-07 (sealed)	Dust Transfer	6,570	0.000031	0.0011		
	SC-08	Dust Transfer	12,909	Included with K102 Baghouse DC-01			
	BE-06 (sealed)	Dust Transfer	12,909	0.000031	0.0011		
	SC-15 (sealed)	Dust Transfer	12,909	0.000031	0.0011		
K114	BN-09	Bin Feeding	19,479	See Table III-A-2 Baghouse DC-04		1.08	1.52
	BN-09	Load Out	19,479				
<b>Kiln 2</b>							

EU	Source EU Identifier	Process Description	Throughput tons/yr	EF (lbs/ton)		PTE (tons/yr)	
				PM <sub>2.5</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>
K202	PH-02	Closed Stone Transfer Point	221,738	See Table III-A-2 Baghouse DC-02		25.83	25.83
	KN-02; 81.25 MMBtu/hr	Rotary Kiln 2	109,500				
	CO-02	Cooler	109,500				
K202a	Auxiliary Kiln Drive; Isuzu	49 hp Diesel Engine	500 hrs.	0.0013 lbs-hp/hr		0.02	0.02
K204	SC-02	Lime Transfer	109,500	See Table III-A-2 Baghouse DC-30		1.24	1.74
	BE-04	Lime Transfer	109,500				
K206	BN-07	Bin Feeding	8,760	0.00031	0.0011	0.14	0.94
	BN-07	Load Out	8,760	0.0323	0.2135		
K208	SC-06	Dust Transfer	3,285	Included with K202 Baghouse DC-02		0.02	0.06
	SC-09 (sealed)	Dust Transfer	13,410	0.00031	0.0011		
	SC-13 (sealed)	Dust Transfer	30,660	0.00031	0.0011		
	BE-07 (sealed)	Dust Transfer	30,660	0.00031	0.0011		
	SC-16 (sealed)	Dust Transfer	30,660	0.00031	0.0011		
K213	BN-10	Bin Feeding	30,660	See Table III-A-2 Baghouse DC-05		1.08	1.52
	BN-10	Load Out	24,660				
K215	DA-BN-502	Bin Feeding	6,000	See Table III-A-2 Binvent DA-DC-507		0.58	0.82
	DA-SC-505 (sealed)	Dust Transfer	6,000	0.00031	0.0011		
	DA-SC-506 (sealed)	Dust Transfer	6,000	0.00031	0.0011		
<b>Kiln 3</b>							
K302	PH-03	Closed Stone Transfer Point	295,650	See Table III-A-2 Baghouse DC-03		36.49	36.49
	KN-03; 91.10 MMBtu/hr	Rotary Kiln 3	146,000				
	CO-03	Cooler	146,000				
K302a	Auxiliary Kiln Drive; Isuzu	49 hp Diesel Engine	500 hrs.	0.0013 lbs-hp/hr		0.02	0.02
K304	SC-03 (sealed)	Lime Transfer	146,000	0.00031	0.0011	0.05	0.16
	SC-04 (sealed)	Lime Transfer	146,000	0.00031	0.0011		
K306	BN-08	Bin Feeding	10,951	0.00031	0.0011	0.18	1.18
	BN-08	Load Out	10,951	0.0323	0.2135		
K308	BN-18	Bin Feeding	4,380	See Table III-A-2 Baghouse DC-03		0.01	0.01
	SC-18	Dust Transfer	4,380				
	SC-18	Load Out	4,380				
	SC-11,12(sealed)	Dust Transfer	17,520	0.00031	0.0011		
<b>Kiln 4</b>							
K402	K4-PH-302	Closed Stone Transfer Point	961,875	See Table III-A-2 Baghouse K4-DC-316		51.70	51.70
	K4-KN-305; 281.25 MMBtu/hr	Rotary Kiln 4	475,000				
	K4-CO-309	Cooler	475,000				

EU	Source EU Identifier	Process Description	Throughput tons/yr	EF (lbs/ton)		PTE (tons/yr)	
				PM <sub>2.5</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>
K402a	Auxiliary Kiln Drive; Isuzu	123 hp Diesel Engine	500 hrs.	0.0022 lbs-hp/hr		0.07	0.07
K404	K4-BC-501	Lime Transfer	471,673	0.00031	0.0011	0.15	0.52
	K4-BC-502	Lime Transfer	475,000	0.00031	0.0011		
	K4-BC-503	Lime Transfer	285,000	Included with K204 Baghouse DC-30			
	K4-BC-504	Lime Transfer	190,000				
K408	K4-BN-338	Bin Feeding	17,500	See Table III-A-2 Bin Filter Receiver K4-DC-336		1.08	1.52
	K4-BN-338	Load Out	17,500	See Table III-A-2 Binvent K4-DC-509			
K410	Emergency Dump	Load Out	3,650	0.0323	0.2135	0.06	0.39
	Emergency Dump Reclaim	Lime Transfer	3,650	0.00031	0.0011		
K412	K4-SC-326 (sealed)	Dust Transfer	19,857	0.00031	0.0011	0.02	0.05
	K4-SC-327 (sealed)	Dust Transfer	19,857	0.00031	0.0011		
	K4-SC-328 (sealed)	Dust Transfer	19,857	0.00031	0.0011		
	K4-SC-329 (sealed)	Dust Transfer	19,857	0.00031	0.0011		
	K4-BE-330 (sealed)	Dust Transfer	19,857	0.00031	0.0011		
K417	K4-BN-508	Bin Feeding	19,857	Included with K408 (Load Out) Binvent K4-DC-509		0.32	2.12
	K4-BN-508	Load Out	19,857	0.0323	0.2135		
K418	K4-PM-514	Dust Transfer	19,857	0.00031	0.0011	0.32	2.13
	K4-PM-514	Load Out	19,857	0.0323	0.2135		
	K4-SC342	Dust Transfer	3,327	0.00031	0.0011		
<b>Solid Fuel Handling</b>							
F101	HO-40,41 (enclosed)	Fuel Transfer	553,862	0.00031	0.0011	0.25	0.88
	BC-40 (sealed)	Fuel Transfer	553,862	0.00031	0.0011		
	BC-44	Fuel Transfer	348,931	0.00031	0.0011		
	Loader Loading	Fuel Transfer	144,000	0.00031	0.0011		
	Loader Unloading	Fuel Transfer	144,000	0.00031	0.0011		
F104	CR-40 (enclosed)	Fuel Crushing	204,931	0.00088	0.0150	0.12	1.65
	SC-44 (enclosed)	Fuel Transfer	204,931	0.00031	0.0011		
F106	BN-41	Bin Feeding	31,885	0.00031	0.0011	0.01	0.04
	BC-41	Fuel Transfer	31,885	0.00031	0.0011		
F108	CM-41 (sealed)	Fuel Crushing	31,885	0.00088	0.0150	0.01	0.24
F110	SC-41 (sealed)	Fuel Transfer	936	0.00031	0.0011	0.01	0.01
	Reject Bin 1	Bin Feeding	936	0.00031	0.0011		
	Reject Bin 1 Loadout	Fuel Transfer	936	0.00031	0.0011		
F112	BN-42	Bin Feeding	31,885	0.00031	0.0011	0.01	0.04
	BC-42	Fuel Transfer	31,885	0.00031	0.0011		

EU	Source EU Identifier	Process Description	Throughput tons/yr	EF (lbs/ton)		PTE (tons/yr)	
				PM <sub>2.5</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>
F114	CM-42 (sealed)	Fuel Crushing	31,885	0.00088	0.0150	0.01	0.24
F116	SC-42 (sealed)	Fuel Transfer	936	0.00031	0.0011	0.01	0.01
	Reject Bin 2	Bin Feeding	936	0.00031	0.0011		
	Reject Bin 2 Load Out	Fuel Transfer	936	0.00031	0.0011		
F118	BN-43 (enclosed)	Bin Feeding	34,415	0.00031	0.0011	0.03	0.30
	BC-43	Fuel Transfer	34,415	0.00031	0.0011		
	CM-43 (sealed)	Fuel Crushing	34,415	0.00088	0.0150		
F122	SC-43 (sealed)	Fuel Transfer	996	0.00031	0.0011	0.01	0.01
	Reject Bin 3	Bin Feeding	996	0.00031	0.0011		
	Reject Bin 3 Load Out	Fuel Transfer	996	0.00031	0.0011		
F125	K4-SC-402 (sealed)	Fuel Transfer	106,746	0.00031	0.0011	0.59	0.94
	K4-BN-404	Bin Feeding	74,722	See Table III-A-2			
	K4-BN-406	Bin Feeding	32,024	Baghouse K4-DC-421			
	K4-WF-408	Fuel Transfer	74,722	0.00031	0.0011		
	K4-WF-409	Fuel Transfer	32,024	0.00031	0.0011		
	K4-BC-410	Fuel Transfer	106,746	0.00031	0.0011		
F131	K4-CM-413 (sealed)	Fuel Crushing	106,746	0.00088	0.0150	0.05	0.80
F132	K4-SC-419 (sealed)	Fuel Transfer	531	0.00031	0.0011	0.01	0.01
	Reject Bin 4	Bin Feeding	531	0.00031	0.0011		
	Reject Bin Load Out	Fuel Transfer	531	0.00031	0.0011		
<b>North Lime Handling</b>							
L101	SC-24	Lime Transfer	10,438	0.00031	0.0011	0.01	0.01
	SC-25 (sealed)	Lime Transfer	10,438	0.00031	0.0011		
	BC-505/BC-20	Lime Transfer	316,307	Included with K104			
	BE-20	Lime Transfer	458,644	Baghouse DC-20			
L105	K4-BN-518	Bin Feeding	13,759	See E.U. C121 Binvent K4-DC-519		0.54	0.76
	K4-SC-524	Lime Transfer	2,752	0.00031	0.0011		
L108	HM-20 (sealed)	Product Crushing	142,363	0.00088	0.015	0.06	1.07
L110	VS-20	Screening Product	444,885	Included with K104		0.02	0.06
	SI-02	Bin Feeding	117,450	Baghouse DC-20			
	SC-21 (sealed)	Lime Transfer	117,450	0.00031	0.0011		
L112	SI-01	Bin Feeding	117,450	Included with K104		0.04	0.13
	SC-23 (sealed)	Lime Transfer	117,450	0.00031	0.0011		
	SC-26 (sealed)	Lime Transfer	117,450	0.00031	0.0011		
L116	SI-06	Bin Feeding	117,450	Included with K104		0.02	0.06
	SC-27 (sealed)	Lime Transfer	117,450	0.00031	0.0011		

EU	Source EU Identifier	Process Description	Throughput tons/yr	EF (lbs/ton)		PTE (tons/yr)	
				PM <sub>2.5</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>
L118	SI-07	Bin Feeding	117,450	Included with K104 Baghouse DC-20		0.01	0.01
	SC-28	Lime Transfer	117,450				
	SC-20 (sealed)	Dust Transfer	1,000	0.00031	0.0011		
<b>South Lime Handling</b>							
L201	K4-BC-506	Lime Transfer	730,500	Included with K204 Baghouse DC-30		0.34	1.21
	SC-30	Lime Transfer	1,000				
	K4-BC-507	Lime Transfer	730,500	Included with K104 Baghouse DC-20			
	BE-30	Lime Transfer	730,500				
	BC-32 (enclosed)	Lime Transfer	730,500	0.00031	0.0011		
	Clean-up Screw Conveyor (enclosed)	Lime Transfer	730,500	0.00031	0.0011		
L206	CR-30	Product Crushing	611,832	See Table III-A-2 Baghouse DC-36		5.41	7.62
	BE-31	Lime Transfer	1,095,750				
	VS-30	Screening Product	1,095,750				
L208	SI-04 (enclosed)	Bin Feeding	121,750	0.00031	0.0011	5.50	7.95
	SI-09 (enclosed)	Bin Feeding	121,750	0.00031	0.0011		
	SI-03 (enclosed)	Bin Feeding	121,750	0.00031	0.0011		
	SI-10 (enclosed)	Bin Feeding	121,750	0.00031	0.0011		
	SI-08	Bin Feeding	121,750	See Table III-A-2 Baghouse DC-35			
	SI-11	Bin Feeding	121,750	0.00031	0.0011		
L209	SC-39 (sealed)	Lime Transfer	121,750	0.00031	0.0011	0.13	0.46
	SC-38 (sealed)	Lime Transfer	121,750	0.00031	0.0011		
	SC-38A (sealed)	Lime Transfer	121,750	0.00031	0.0011		
	SC-37 (sealed)	Lime Transfer	121,750	0.00031	0.0011		
	SC-36 (sealed)	Lime Transfer	243,499	0.00031	0.0011		
	SC-40 (sealed)	Dust Transfer	968	0.00031	0.0011		
	SC-41 (sealed)	Dust Transfer	968	0.00031	0.0011		
L224	BC-37	Lime Transfer	121,750	0.00031	0.0011	0.02	0.07
<b>Hydrate</b>							
H101	SC-101 (sealed)	Hydrate Transfer	71,550	0.00031	0.0011	0.01	0.04
H102	Small Bin (enclosed)	Bin Feeding	71,550	0.00031	0.0011	0.02	0.08
	SC-105 (sealed)	Hydrate Transfer	71,550	0.00031	0.0011		
H105	MX-106 (sealed)	Hydrate Transfer	71,550	0.00031	0.0011	4.83	6.87
	HY-107	Hydrator	93,015	See Table III-A-2 Baghouse DC-109			
	Hydrator Baghouse Burner; 1.83 MMBtu/hr	Gas combustion	16.0 MMcf/yr				
	SC-111 (sealed)	Hydrate Transfer	93,015	0.00031	0.0011		
H108	BE-113 (sealed)	Hydrate Transfer	93,909	0.00031	0.0011	0.03	0.17

EU	Source EU Identifier	Process Description	Throughput tons/yr	EF (lbs/ton)		PTE (tons/yr)	
				PM <sub>2.5</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>
	VS-115 (enclosed)	Product Screening	16,099	0.0006	0.0087		
	SC-117 (sealed)	Hydrate Transfer	93,015	0.00031	0.0011		
H109	CR-116 (sealed)	Product Crushing	894	0.00088	0.015	0.01	0.01
H110	SC-119 (sealed)	Hydrate Transfer	894	0.00031	0.0011	0.01	0.01
H116	SC-118 (sealed)	Hydrate Transfer	93,015	0.00031	0.0011	0.04	0.15
	BE-120 (sealed)	Hydrate Transfer	93,015	0.00031	0.0011		
	SC-121 (sealed)	Hydrate Transfer	93,015	0.00031	0.0011		
	SI-05	Bin Feeding	93,015	Included with H105 Baghouse DC-109			
<b>Dolomite Handling</b>							
D101	D-BN-201	Open Stone Transfer Point	233,408	0.00031	0.0011	0.04	0.13
	D-BC-202	Open Stone Transfer Point	233,408	0.000013	0.000046		
D104	D-BC-207	Open Stone Transfer Point	233,408	0.000013	0.000046	0.01	0.09
	D-VS-208	Screening Stone	233,408	0.00005	0.00074		
D104a	D-BC-213	Open Stone Transfer Point	221,738	0.000013	0.000046	0.01	0.01
D105	D-BC-209	Open Stone Transfer Point	11,670	0.000013	0.000046	0.01	0.01
	D-BE-210	Open Stone Transfer Point	11,670	0.000013	0.000046		
	D-BN-211	Open Stone Transfer Point	11,670	0.000013	0.000046		
	D-BN-211	Load Out	11,670	0.000013	0.000046		
<b>Dolomitic Lime Handling</b>							
D201	D-HM-510 (sealed)	Product Crushing	109,500	0.00088	0.0150	0.05	0.82
D202	D-SC-511 (sealed)	Lime Transfer	109,500	0.00031	0.0011	3.27	4.64
	D-SC-512	Lime Transfer	109,500	See Table III-A-2 Baghouse DC-526			
	D-SC-513	Lime Transfer	109,500	See E.U. C113 Binvent D-DC-520			
	D-SC-514	Lime Transfer	109,500				
	D-SC-515	Lime Transfer	109,500				
D208	D-SC-516 (sealed)	Lime Transfer	109,500	0.00031	0.0011	0.03	0.12
	SI-11, SI-12	Bin Feeding	109,500	0.00031	0.0011		
D211	D-BE-4214	Lime Transfer	109,500	See Table III-A-2 Binvent D-DC-505		0.54	0.76
	D-BN-504	Bin Feeding	4,900				
	D-SC-508 (sealed)	Lime Transfer	4,900	0.00031	0.0011		
<b>Miscellaneous Operations</b>							
O101	Ore Spillage	Open Stone Transfer Point	300	0.00031	0.0011	0.01	0.03
	Ore Spillage Reclaim	Open Stone Transfer Point	300	0.00031	0.0011		
	Ore Reclaim Unloading	Open Stone Transfer Point	300	0.00031	0.0011		
	Product Spillage	Lime Transfer	300	0.00031	0.0011		
	Product Spillage Reclaim	Lime Transfer	300	0.00031	0.0011		

EU	Source EU Identifier	Process Description	Throughput tons/yr	EF (lbs/ton)		PTE (tons/yr)	
				PM <sub>2.5</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>
	Product Reclaim Unloading	Load Out	300	0.0323	0.2135		
O107	Kiln 1-3 Dump/Bypass	Lime Transfer	50	0.00031	0.0011	0.01	0.01
	Kiln 1-3 Dump/Bypass Reclaim	Lime Transfer	50	0.00031	0.0011		
	Kiln 1-3 Dump/Bypass Unloading	Load Out	50	0.0323	0.2135		
<b>5,000 Ton Storage Silo Reclaim System</b>							
S101	Kiln Product to BC-8001	Lime Transfer	180,000	See Table III-A-2 Baghouse DC-8001		2.25	3.17
S102	BC-8001 to BE-8001	Bin Feeding	180,000	See Table III-A-2 Baghouse DC-8002		1.11	1.56
	BE-8001 to SC-8001	Lime Transfer	180,000	See Table III-A-2 Baghouse DC-8003			
	SC-8001 to SI-RC	Lime Transfer	180,000				
	SI-RC to BC-8002	Lime Transfer	180,000	See Table III-A-2			
	BC-8002	Lime Transfer	180,000	Baghouse DC-8004			
<b>Quick Lime Truck and Rail Load Out System</b>							
LO101	SC-5001	Lime Transfer	66,409	See Table III-A-2 Baghouse DC-5007		0.90	1.27
	TC-1001	Load Out	66,409				
LO104	BCF-5002	Lime Transfer	66,409	See Table III-A-2 Baghouse DC-5001		0.90	1.27
	TC-1002	Load Out	132,818				
LO106	BCF-5004	Lime Transfer	66,409	See Table III-A-2 Baghouse DC-5002		0.90	1.27
	BCF-5005	Lime Transfer	66,409				
	TC-1003	Load Out	132,818				
LO109	BCF-5006	Lime Transfer	54,750	See Table III-A-2 Baghouse DC-5003		0.90	1.27
	BCF-5007	Lime Transfer	54,750				
	TC-1004	Load Out	109,500				
LO112	SC-5008	Lime Transfer	93,015	See Table III-A-2 Baghouse DC-5006		1.36	1.92
	TC-1005	Load Out	93,015				
LO114	BCF-5009	Lime Transfer	66,409	See Table III-A-2 Baghouse DC-5004		0.90	1.27
	BCF-5010	Lime Transfer	66,409				
	TC-1006	Load Out	132,818				
LO117	BCF-5011	Lime Transfer	66,409	See Table III-A-2 Baghouse DC-5005		0.90	1.27
	BCF-5012	Lime Transfer	66,409				
	TC-1007	Load Out	132,818				
<b>Portable Screening Plant</b>							
SP1	Hopper Loading & Unloading	Open Stone Transfer Point	1,500,000	0.000013	0.000046	0.01	0.05
	Conveyor Belt	Open Stone Transfer Point	750,000	0.000013	0.000046		

EU	Source EU Identifier	Process Description	Throughput tons/yr	EF (lbs/ton)		PTE (tons/yr)	
				PM <sub>2.5</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>
	SP-2						
SP3	Screen SP-3	Stone Screening	750,000	0.00005	0.00074	0.02	0.29
	Stacker Belt	Open Stone Transfer Point	250,000	0.000013	0.000046		
	Stacker Belt	Open Stone Transfer Point	250,000	0.000013	0.000046		
	Stacker Belt	Open Stone Transfer Point	250,000	0.000013	0.000046		
SP7	Diesel-Powered Generator; 218 hp	Electricity Generation	2,500 hours/yr	0.0022 lbs/hp-hr		0.24	0.24
LD4	Loader Loading	Open Stone Transfer Point	750,000	0.000013	0.000046	0.01	0.03
	Loader Unloading	Open Stone Transfer Point	750,000	0.000013	0.000046		
<b>Transloader</b>							
TL1	Railcar Unloading (baghouse)	Product Transfer	75,000	0.00031	0.0011	0.01	0.04
TL3	Diesel-Powered Generator; 80 hp	Electricity Generation	940 hours/yr	0.0009 lbs/hp-hr		0.03	0.03
<b>Lime Screening System</b>							
L101a	Conveyor SC-24 to Conveyor D-SC-4221	Lime Transfer (From North Lime Handling)	10,438	0.00031	0.0011	0.01	0.01
	Conveyor D-SC-4221 to Bucket Elevator BE-03	Lime Transfer	10,438	0.00031	0.0011		
K104b	Conveyor SC-02 to Conveyor D-SC-4207	Lime Transfer (From Kiln 1)	109,500	0.00031	0.0011	0.02	0.06
PL101	Conveyor D-SC-4207 to Bucket Elevator D-BE-4214	Lime Transfer	109,500	0.00031	0.0011	0.02	0.06
PL102	Bucket Elevator D-BE-4214 to Bin D-BN-504	Bin Feeding	109,500	See Table III-A-2 Binvent D-DC-505		0.54	0.76
PL103	Bucket Elevator D-BE-4214 to Conveyor D-SC-4215	Lime Transfer	109,500	0.00031	0.0011	0.02	0.06
PL104	Conveyor D-SC-4215 to Dololime Screen D-VS-4216	Lime Transfer	109,500	0.00031	0.0011	0.84	1.22
	Dololime Screen D-VS-4216	Screening Product	109,500	See Table III-A-2 Baghouse D-DC-4217			
	Dololime Screen D-VS-4216 to Silo 6	Lime Transfer	109,500				

EU	Source EU Identifier	Process Description	Throughput	EF (lbs/ton)		PTE (tons/yr)	
			tons/yr	PM <sub>2.5</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>
	Dolomite Screen D-VS-4216 to Conveyor D-SC-4217	Lime Transfer	109,500				
PL105	Conveyor D-SC-4217 to Conveyor D-SC-4220	Lime Transfer	109,500	0.00031	0.0011	0.03	0.12
	Conveyor D-SC-4220 to Crusher D-HM-510	Lime Transfer	109,500	0.00031	0.0011		
<b>Haul Roads</b>							
V01	Haul Roads; Unpaved	245,916 VMT/year				4.71	43.46
V02	Import/Shipping Toads; Paved	15,868 VMT/year				0.64	6.50
V03	Reject Material Removal Exit Roads; Unpaved	13,636 VMT/year				0.04	0.37
V04	Lime Plant Roads; Paved	35,100 VMT/year				1.14	10.21
V05	Lime Plant Roads; Unpaved	13,676 VMT/year				0.11	0.85
V06	Dozer travel; paved	3,000 VMT/year				0.11	1.02
<b>Open Storage Areas</b>							
EU	Source EU Identifier	Disturbed Surfaces/ Stockpiles	EF		CF	PTE (tons/yr)	
			PM <sub>2.5</sub>	PM <sub>10</sub>		PM <sub>2.5</sub>	PM <sub>10</sub>
A01	Quarry Areas	15.18 acres	0.954 lbs/acre-day	6.3 lbs/acre-day	0.327	2.48	16.36
	Limestone at Hopper	1.72 acres					
	Fine Kiln Feed Stockpile	2.51 acres					
	Course Kiln Feed Stockpile	2.74 acres					
	Glass Flux Feed Stockpile	8.76 acres					
	Kiln 4 Chat Stockpile	0.04 acres					
	Chat Stockpile	0.61 acres					
	Solid Fuel Stockpile; Coal	0.38 acres					
	Solid Fuel Storage; Coke	0.38 acres					
	Dolomite Stockpile	0.82 acres					
	Fine Dolomite Stockpile	1.80 acres			0.124		
Coarse Dolomite	1.81 acres						

EU	Source EU Identifier	Process Description	Throughput tons/yr	EF (lbs/ton)		PTE (tons/yr)	
				PM <sub>2.5</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>
	Stockpile						
	Portable Screening Plant Stockpiles	2.25 acres					
	Dolomite at Hopper	2.01 acres					
	Waste Lime Stockpile	3.07 acres			0.327		
	Waste Flue Dust Stockpile	3.08 acres					

<sup>1</sup>Control factors: 0.124 = 2.0 percent moisture content; 0.327 = 1.0 percent moisture content;

**Table III-A-2: Baghouses and Binvents<sup>1</sup>**

Baghouse/Binvent Identification	Process	Flow Rate		Outlet PM <sub>10</sub> Loading (grains/dscf)	PTE (tons/year)
		acfm	dscfm		
DC-01	Kiln 1	50,000	31,475	0.0219	25.83
DC-02	Kiln 2	50,000	31,475	0.0219	25.83
DC-03	Kiln 3	70,000	44,466	0.0219	36.49
DC-04	Kiln Dust Load Out	2,000	1,856	0.0219	1.52
DC-05	Kiln Dust Load Out	2,000	1,856	0.0219	1.52
DC-20	North Lime Handling	10,000	9,282	0.0219	7.62
DC-30	South Lime Handling	5,000	4,631	0.0100	1.74
DC-35	South Lime Handling	10,000	9,282	0.0219	7.62
DC-36	South Lime Handling	10,000	9,282	0.0219	7.62
DC-109	Hydrator	12,000	8,256	0.0219	6.78
DA-DC-507	Dust Blend Bin Vent	1,060	984	0.0219	0.81
D-DC-505	Upset Bin Vent	1,000	928	0.0219	0.76
D-DC-520	Dolomitic bin Vent	3,000	2,784	0.0219	2.29
D-DC-526	Dolomitic Lime Handling	3,000	2,784	0.0219	2.29
K4-DC-316	Kiln 4	168,700	97,525	0.0131	48.00
K4-DC-336	Dribble Bin Filter	1,000	928	0.0219	0.76
K4-DC-340	Kiln 4 Cooler	13,000	9,846	0.0100	3.70
K4-DC-421	Kiln 4 Fuel Bins	1,000	928	0.0219	0.76
K4-DC-509	Kiln 4 Dust Bin Vent	1,000	928	0.0219	0.76
K4-DC-516	Filter receiver	1,200	1,114	0.0219	0.91
K4-DC-519	Start-up Bin	1,000	928	0.0219	0.76
DC-8001	5,000 ton Silo System	9,125	8,452	0.0100	3.17
DC-8002	5,000 ton Silo System	1,500	1,389	0.0100	0.52
DC-8003	5,000 ton Silo System	1,500	1,389	0.0100	0.52
DC-8004	5,000 ton Silo System	1,500	1,389	0.0100	0.52
DC-5001	South Lime Handling	3,650	3,381	0.0100	1.27
DC-5002	North Lime Handling	3,650	3,381	0.0100	1.27
DC-5003	South Lime Handling	3,650	3,381	0.0100	1.27

Baghouse/Binvent Identification	Process	Flow Rate		Outlet PM <sub>10</sub> Loading (grains/dscf)	PTE (tons/year)
		acfm	dscfm		
DC-5004	South Lime Handling	3,650	3,381	0.0100	1.27
DC-5005	North Lime Handling	3,650	3,381	0.0100	1.27
DC-5006	Hydrator	5,500	5,094	0.0100	1.91
DC-5007	South Lime Handling	3,650	3,381	0.0100	1.27
D-DC-4217	Pebble Lime Screening	3,326	3,078	0.0100	1.16

<sup>1</sup>The total PTE from each emission unit in this table is tabulated in Table IV-A-1.

**Table III-A-3: Emission Units and PM<sub>10</sub> Emissions for Reject Material Removal**

EU	Description	Process	Throughput		EF (lbs/ton)	CF <sup>1</sup>	PTE tons/yr
			tons/hr	tons/yr			
A1	Loader Loading	Reject Material Removal	1,000	1,000,000	0.0025	0.124	0.32
	Loader Unloading	Reject Material Removal	1,000	1,000,000	0.0025	0.124	
A56	Aggregate Plant Storage Pile		7.33 Acres		6.3 lbs/acre-day	0.180	1.52

<sup>1</sup>Control factor: 0.124 is equivalent to 2.0 percent moisture content

**Table III-A-4: PTE for Limestone Mining and Manufacturing of Lime Products, Except PM<sub>10</sub>**

EU	Description	Throughputs		Pollutants	EF (year) (lbs/ton)	PTE (tons/yr)
		hour	year			
H105	Hydrator Baghouse Burner	1.8 E-03 MMcf	16.0 MMcf	NOx	100.00 lbs/MMcf	0.80
				CO	84.00 lbs/MMcf	0.67
				SO <sub>x</sub>	0.60 lbs/MMcf	0.01
				VOC	5.50 lbs/MMcf	0.04
				Total HAP	5.50 lbs/MMcf	0.04
K102	KN-01; Rotary Kiln 1; 81.25 MMBtu/hr	15.0 tons (stone) and 4.41 tons (fuel)	109,500 tons (stone) and 33,108 tons (fuel)	NOx	6.27 lbs/ton	343.49
				CO	2.25 lbs/ton	122.97
				SO <sub>x</sub>	7.55 lbs/ton	413.09
				VOC	0.06 lbs/ton fuel	0.99
				HCl	FTIR Test	14.38
				Other HAP <sup>1</sup>	0.01457 lbs/ton fuel	0.24
				Total HAP		14.62
K202	KN-02; Rotary Kiln 2; 81.25 MMBtu/hr	13.0 tons (stone) and 4.28 tons (fuel)	109,500 tons (stone) and 37,490 tons (fuel)	NOx	6.39 lbs/ton	349.85
				CO	2.29 lbs/ton	125.16
				SO <sub>x</sub>	4.96 lbs/ton	271.56
				VOC	0.06 lbs/ton fuel	1.12
				HCl	FTIR Test	1.40
				Other HAP <sup>1</sup>	0.01457 lbs/ton fuel	0.27
				Total HAP		1.67
K302	KN-03; Rotary Kiln 3; 95.10 MMBtu/hr	17.0 tons (stone) and 5.34 tons (fuel)	146,000 tons (stone) and 46,741 tons (fuel)	NOx	6.55 lbs/ton	478.15
				CO	2.35 lbs/ton	171.55
				SO <sub>x</sub>	5.75 lbs/ton	419.75
				VOC	0.06 lbs/ton fuel	1.40
				HCl	FTIR Test	2.29
				Other HAP <sup>1</sup>	0.01457 lbs/ton fuel	0.34
				Total HAP		2.63
K402	KN-KN-305;	56.25	475,000	NOx	2.956 lbs/ton	702.05

EU	Description	Throughputs		Pollutants	EF (year) (lbs/ton)	PTE (tons/yr)
		hour	year			
	Rotary Kiln 4; 281.25 MMBtu/hr	tons (stone) and 13.76 tons (fuel)	tons (stone) and 116,163 tons (fuel)	CO	2.00 lbs/ton	475.00
				SO <sub>x</sub>	2.27 lbs/ton	539.13
				VOC	0.06 lbs/ton fuel	3.48
				HCl	FTIR Test	3.05
				Other HAP <sup>1</sup>	0.01457 lbs/ton fuel	0.85
				Total HAP		3.90
Q103	Blasting Agent	30 tons	1,370 tons	NO <sub>x</sub>	17.0 lbs/ton	11.65
				CO	67.0 lbs/ton	45.90
				SO <sub>x</sub>	3.0 lbs/ton	2.06
SP7	Diesel-Powered Generator; 218 hp; Manufactured: 2006	1 hour	2,500 hours	NO <sub>x</sub>	1.50E-02 lbs/hp-hour	4.15
				CO	1.87E-02 lbs/hp-hour	5.11
				SO <sub>x</sub>	2.05E-03 lbs/hp-hour	0.56
				VOC	2.51E-03 lbs/hp-hour	0.69
				Total HAP	2.71E-05 lbs/hp-hour	0.01
TL3	Diesel-Powered Generator; 80 hp; Manufactured: 2007	1 hour	940 hours	NO <sub>x</sub>	1.15E-02 lbs/hp-hour	0.43
				CO	8.16E-03 lbs/hp-hour	0.31
				SO <sub>x</sub>	2.10E-03 lbs/hp-hour	0.08
				VOC	2.51E-03 lbs/hp-hour	0.10
				Total HAP	2.71E-05 lbs/hp-hour	0.01
K102a	Kiln 1 Auxiliary Drive Engine; Isuzu; 49 hp; M/N: C240; S/N: 860824	1 hour	500 hours	NO <sub>x</sub>	1.60E-02 lbs/hp-hour	0.20
				CO	9.00E-03 lbs/hp-hour	0.11
				SO <sub>x</sub>	2.05E-03 lbs/hp-hour	0.03
				VOC	2.51E-03 lbs/hp-hour	0.03
				Total HAP	2.71E-05 lbs/hp-hour	0.01
K202a	Kiln 2 Auxiliary Drive Engine; Isuzu; 49 hp; M/N: C240; S/N: 779553	1 hour	500 hours	NO <sub>x</sub>	1.60E-02 lbs/hp-hour	0.20
				CO	9.00E-03 lbs/hp-hour	0.11
				SO <sub>x</sub>	2.05E-03 lbs/hp-hour	0.03
				VOC	2.51E-03 lbs/hp-hour	0.03
				Total HAP	2.71E-05 lbs/hp-hour	0.01
K302a	Kiln 3 Auxiliary Drive Engine; Isuzu; 49 hp; M/N: C240; S/N: 854004	1 hour	500 hours	NO <sub>x</sub>	1.60E-02 lbs/hp-hour	0.20
				CO	9.00E-03 lbs/hp-hour	0.11
				SO <sub>x</sub>	2.05E-03 lbs/hp-hour	0.03
				VOC	2.51E-03 lbs/hp-hour	0.03
				Total HAP	2.71E-05 lbs/hp-hour	0.01
K402a	Kiln 4 Auxiliary Drive Engine; Isuzu; 123 hp; M/N: 6BB1; S/N: 6BB1S64832	1 hour	500 hours	NO <sub>x</sub>	3.10E-02 lbs/hp-hour	0.95
				CO	6.68E-03 lbs/hp-hour	0.21
				SO <sub>x</sub>	2.05E-03 lbs/hp-hour	0.06
				VOC	2.51E-03 lbs/hp-hour	0.08
				Total HAP	2.71E-05 lbs/hp-hour	0.01
T101	1,000 gallon aboveground storage tank (Gasoline)	N/A	60,000 gallons	VOC	0.0112	0.34
				Total HAP	2.53E-04	0.01
T102	10,000 gallon aboveground storage tank (Diesel)	N/A	700,000 gallons	VOC	2.86E-05	0.01
				Total HAP	1.97E-06	0.01

<sup>1</sup>Other HAP includes benzene, ethyl benzene, formaldehyde, hexane, toluene, and Xylene.

**Table III-A-5: Insignificant Activities**

Description
Hydrochloric Acid (5.0% volatile)
Scale Solvent (contains HCL, 2.5% volatile)
Thinner (contains Benzene)

**B. Emission Limitations and Standards**

**1. Emission Limits**

- a. The Permittee shall operate all emission units in Tables III-A-1 through III-A-4 inclusive in a manner so that neither the actual nor the allowable emissions shall exceed the emission unit PTE. *[NSR – ATC/OP Modification 10, Revision 0, Section II-B, Condition 1, 05/22/06 and AQR 12.5.2.6]*
- b. The Permittee shall operate the rotary kilns such that the weighted average of PM emissions from all four rotary kilns, combined, shall not exceed 0.12 lbs/tsf at all times during operation. The emission limits are delineated in Table III-B-1 (EUs: K102, K202, K302, and K402). *[40 CFR 63.7090]*

**Table III-B-1: Combined Emission Limits for Kilns**

EU	Combined Stone Feed Rate		MACT Combined Kiln Limit (lbs/tsf)	Combined PTE Limit (tons/yr)
	tons/hr	tons/year		
K102, K202, K302, & K402	202.60	1,701,001	0.12	102.6

- c. Actual Emissions from kiln 4 shall not exceed the PTE listed in Table III-B-2.

**Table III-B-2: Kiln 4 Limits**

Averaging Period	PM <sub>10</sub>	NO <sub>x</sub>	CO	SO <sub>2</sub>	VOC	HAP
Pounds/3-hour total	N/A	N/A	N/A	382.5	N/A	N/A
Pounds/8 hours	N/A	N/A	5,400	N/A	N/A	N/A
Pounds/day	250.7	16,000	16,200	3,060	80	21.37 <sup>1</sup>
Tons/year	44.10	702.05	475.00	537.94	3.48	3.90 <sup>1</sup>

<sup>1</sup> The figures for HAP emissions were utilized for determination of MACT applicability and are provided here for information only.

- d. Stack emissions from all PSH operations shall not exceed 0.05 grams per dry standard cubic meter (0.0219 grains/dscf). *[40 CFR 63.7090]*
- e. The Permittee shall not allow visible stack emissions, discharged from any PSH baghouse or binvent, to exceed 7 percent opacity as determined using EPA Method 9. *[40 CFR 63.7090]*
- f. The Permittee shall not allow visible fugitive emissions, from any PSH operation, to exceed 10 percent opacity as determined using EPA Method 9. *[40 CFR 63.7090]*

- g. The Permittee shall not allow visible stack emissions discharged from each of the rotary kilns to exceed 15 percent opacity as determined using EPA Method 9. [40 CFR 63.7090]
- h. The Permittee shall demonstrate compliance with a CO concentration limit of the diesel powered generator (EU: SP7) and the kiln 4 Auxiliary Drive Engine (EU: K402a) of 230 ppmvd or less at 15% O<sub>2</sub> within 180 days after May 3, 2013. [40 CFR 63.6603(a), 6612, and 6595]
- i. The Permittee shall operate the John Deere 80 hp generator (EU TL3) in accordance to the manufacturer’s written instructions or procedures approved by the manufacturer over the entire life of the engine. [40 CFR 60.4206]
- j. The Permittee shall operate the John Deere 80 hp diesel-powered generator in compliance with the emission standards set forth in 40 CFR 89.112 and 40 CFR 89.113 for new nonroad CI engines for the same model year and maximum engine power (EU: TL3). The emission standards are provided in Table III-B-3: [40 CFR 60 Subpart III]

**Table III-B-3: Emission Standards for Emission Unit TL3**

Maximum Engine Power	NMHC + NOx	CO	PM
37≤kW<75	7.5 g/kW-hr	5.0 g/kW-hr	0.40 g/kW-hr

**2. Production Limits**

- a. The Permittee shall calculate hourly records required by this permit using the total daily record divided by 24, except in the cases of kiln 4 and the portable screening plant. In the cases of kiln 4 and the portable screening plant, average hourly records shall be calculated using the total daily records of kiln 4 and the portable screening plant, respectively, divided by the hours of Kiln 4 and the portable screening plant, respectively, operated that day. [NSR - ATC/OP Modification 10, Revision 0, Section III-H, Condition 6, (05/22/06)]
- b. The Permittee shall limit mining operations to 5,360,000 tons per any consecutive twelve month period. [NSR - ATC/OP Modification 10, Section III-A, Condition 2, (05/22/06)]
- c. The Permittee shall limit blasting operations, using ammonium nitrate fuel oil (ANFO), to 1,370 tons per any consecutive twelve month period. [AQR 12.5.2.6(a)]
- d. The Permittee shall limit the amount of limestone processing (crushing and screening) to 2,680,000 tons per any consecutive twelve month period. [NSR – ATC/OP Modification 10, Section III-A, Condition 4, (05/22/06)]
- e. The Permittee shall limit the throughputs in kiln 1 and kiln 2 each, to 109,500 tons per any consecutive twelve month period. [AQR 12.5.2.3(a)]
- f. The Permittee shall limit the throughput in kiln 3 to 146,000 tons per any consecutive twelve month period. [NSR - ATC/OP Modification 10, Section III-A, Condition 7, (05/22/06)]
- g. The Permittee shall limit the throughput in kiln 4 to 1,350 tons per day, based on a calendar month average, and 475,000 tons per any consecutive twelve month period. [AQR12.5.2.6(a)]
- h. The Permittee shall limit solid fuel handling and processing to 553,863 tons per any consecutive twelve month period. [NSR - ATC/OP Modification 10, Table II-A-2, (05/22/06)]

- i. The Permittee shall limit dolomite handling and processing to 233,408 tons per any consecutive twelve month period. *[AQR 12.5.2.6(a)/19.4.1.3]*
- j. The Permittee shall limit dolomitic lime handling to 109,500 tons per any consecutive twelve month period. *[AQR 12.5.2.6(a)/19.4.1.3]*
- k. The Permittee shall limit the throughput at the portable screening plant to 1,500,000 tons per any consecutive twelve month period. *[AQR 12.5.2.6(a)/19.4.1.3]*
- l. The Permittee shall limit the transloading of materials to 75,000 tons per any consecutive twelve month period. *[NSR - ATC/OP Modification 10, Table III-A-2, (05/22/06)]*
- m. The Permittee shall limit the quicklime loadout to trucks and railcars to 66,409 tons per any consecutive twelve month period. *[AQR 12.5.2.6(a)/19.4.1.3]*
- n. The Permittee shall limit lime transfer through the silo reclaim system to 180,000 tons per any consecutive twelve month period. *[NSR - ATC/OP Modification 10, Table II-A-2, (05/22/06)]*
- o. The Permittee shall limit the lime handling (north) to 10,438 tons per any consecutive twelve month period. *[AQR 12.5.2.6(a)/19.4.1.3]*
- p. The Permittee shall limit the lime handling (south) to 730,500 tons per any consecutive twelve month period. *[AQR 12.5.2.6(a)/19.4.1.3]*
- q. The Permittee shall limit the throughput of gasoline products to 60,000 gallons per any consecutive twelve month period (EU: T101). *[NSR - ATC/OP Modification 10, Table II-A-2, (05/22/06)]*
- r. The Permittee shall limit operation of the 218-hp portable screening generator to 2,500 hours per any consecutive twelve month period (EU: SP7). *[NSR - ATC/OP Modification 10, Section III-A, Condition 9, (05/22/06)]*
- s. The Permittee shall limit the hours of operation of the 80-hp transloader generator to 940 hours per any consecutive twelve month period (EU TL3). *[NSR - ATC/OP Modification 10, Section III-A, Condition 10, (05/22/06)]*
- t. The Permittee shall limit the operation of the 123 hp and three 49 hp diesel auxiliary kiln drive engines to a maximum of 500 hours each per any consecutive twelve month period. *[AQR 12.5.2.6(a)]*
- u. The Permittee shall limit the consumption of natural gas for combustion of the hydrator baghouse burner to 16 million cubic feet per any consecutive twelve month period. *[NSR - ATC/OP Modification 10, Table II-A-2, (05/22/06)]*
- v. The Permittee shall limit production of material through the Lime Screening System to 109,500 tons per any consecutive twelve month period. *[NSR – ATC modification 14, Revision 0, Condition IV-A-2-b, (10/06/10)]*

### **3. Emission Controls**

- a. Except as otherwise provided by Condition III-C-1, wherever a baghouse is used to control emissions from process equipment, the Permittee shall ensure said baghouse is in use at all times the process equipment is operating. *[NSR – ATC/OP Modification 10, Section III-B, Condition 5, (05/22/06)]*

- b. Except as otherwise provided by Condition III-C-6, wherever a binvent is used to control emissions from process equipment, the Permittee shall ensure said binvent is in use at all times the process equipment is operating. *[NSR – ATC/OP Modification 10, Section III-B, Condition 5, (05/22/06)]*
- c. The Permittee shall control fugitive dust emissions from all paved haul roads located on the site. Preventative measures shall include, but are not limited to, vacuuming, sweeping and/or rinsing every weekday (except legal holidays) as necessary. If weekend and/or legal holiday activity at the facility increases above current minimal operations, the Control Officer may revise this condition as appropriate. Silt loading shall not exceed 30 grams per square meter (0.098 ounces per square foot) regardless of the average number of vehicles per day. Daily vacuuming, sweeping or rinsing of paved haul roads is not required on any given day to control silt loading if silt loading on paved haul roads is effectively controlled by natural precipitation on that day. *[NSR – ATC/OP Modification 10, Section III-B, Condition 9 (05/22/06)]*
- d. The Permittee shall control fugitive dust emissions from all unpaved haul roads located on the site. Preventative measures shall include, but are not limited to, paving, applying a dust palliative or by an alternate method approved by the Control Officer so as to not exhibit opacity greater than 20 percent using the AQR opacity test method for unpaved roads. Silt loading shall not exceed 55 grams per square meter (0.18 ounces per square foot) regardless of the average number of vehicles per day. *[NSR – ATC/OP Modification 10, Section III-B, Condition 11, (05/22/06)]*
- e. The Permittee shall minimize visible deposits of mud silt, rock or soil trackout attributable to site operations and visible on public or private paved roads or paved parking lots. Preventative measures shall include, but are not limited to, sweeping or washing every weekday (except legal holidays) and as needed. If weekend and/or legal holiday activity at the facility increases above current minimal operations, the Control Officer may revise this condition as appropriate. *[NSR – ATC/OP Modification 10, Section III-B, Condition 15, (05/22/06)]*
- f. The Permittee shall vent captured emissions from each emission unit subject to 40 CFR 63 Subpart AAAAA, equipped with an add-on air pollution control device through a closed system. Dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter. *[40 CFR 63.7090(b), Table 2 Item 6]*
- g. The Permittee shall ensure that all loaded trucks leaving the site, regardless of ownership, shall be properly covered or sealed to prevent visible emissions during hauling of materials. *[NSR – ATC/OP Modification 10, Section III-B, Condition 14 (05/22/06)]*
- h. The Permittee shall not allow fugitive emissions from screens, conveyors and transfer points that commenced construction, modification or reconstruction after August 31, 1983 but before April 22, 2008 to exhibit an average opacity greater than 10 percent. This is applicable to the following Emission Units: BC-103 of EU: P103, BN226 of EU: P112, and all equipment associated with EUs: P106, P107, P109, P112, P114, P115, R117, R120, D101, D104, and D105. *[40 CFR 60, Subpart 000]*

- i. The Permittee shall not allow fugitive emissions from crushers that commenced construction, modification or reconstruction after August 31, 1983 but before April 22, 2008 to exhibit an average opacity greater than 15 percent. This is applicable to the following Emission Unit: CC201 of EU: P109. *[40 CFR 60, Subpart 000]*
- j. The Permittee shall inspect water spray systems each day that limestone processing operations are conducted. Water sprays shall be maintained in good operating condition and shall be used to control fugitive emissions. *[NSR – ATC/OP Modification 10, Section III-B, Condition 3, (05/22/06)]*
- k. The Permittee shall ensure that fugitive dust emissions from all emission units, not elsewhere classified, exhibit an average opacity no greater than 20 percent as determined by conducting observations in accordance with EPA Method 9. *[AQR 26.1.1]*
- l. The Permittee shall use only low sulfur (<0.05 percent sulfur by weight) diesel fuel for combustion of all diesel-powered generators and auxiliary kiln drive engines (EUs: SP7, TL3, K102a, K202a, K302a, and K402a). *NSR - ATC/OP Modification 10, Revision 0, Section III-B, Condition 17, (05/22/06); AQR 29.1]*
- m. The Permittee shall equip the two diesel-powered generators with turbochargers and aftercoolers (EUs: SP7 and TL3). *[NSR - ATC/OP Modification 10, Section III-B, Condition 23, (05/22/06)]*
- n. The 80 hp diesel-powered generator is subject to the provisions of 40 CFR 60 Subpart IIII. The Permittee shall only combust diesel fuel with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume in this engine. *[40 CFR 60 Subpart IIII]*
- o. The Permittee shall comply with the following requirements for the auxiliary kiln drive engines (EU K102a, K201a, K302a, K402a) and the diesel powered generator (EU SP7):
  - a. Minimize the time each engine spends at idle during startup and minimize the startup time to a period needed for safe loading of the engine, not to exceed 30 minutes. *[40 CFR 63.6625(h)]*
  - b. Change oil and filter every 500 hours of operation or annually, whichever comes first (EUs: K102a, K202a, and K302a). *[40 CFR 63.6603(a)]*
  - c. Inspect all air cleaner every 1,000 hours of operation or annually, whichever comes first (EUs: K102a, K202a, and K302a). *[40 CFR 63.6625(a)]*
  - d. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary (EUs: K102a, K202a, and K302a). *[40 CFR 63.6602]*
- p. Any disturbed vacant area which is greater than 5,000 square feet and which is closed or idled for a period of 30 or more consecutive days shall be, stabilized within ten days following the cessation of active operations in that vacant area. Long-term stabilization includes, but is not limited to, one or more of the following: applying water to form a crust, applying palliatives, applying gravel, paving, denying unauthorized access or other effective control measure to prevent fugitive dust from becoming airborne. *[NSR- ATC/OP Modification 10, Section III-B, Condition 13 (05/22/06)]*

- q. The Permittee shall comply with the control requirements contained in this section. If there is inconsistency between standards or requirements, the most stringent standard or requirement shall apply. *[NSR – ATC/OP Modification 10, Revision 0, Section III-B, Condition 35 (05/22/06)]*

## C. Monitoring

1. At least once every two weeks, the Permittee shall conduct visual inspections of the exterior of each operating baghouse to ensure that it does not exhibit fugitive emissions or any measurable opacity. In addition, the visual inspection of baghouse stack emissions shall ensure that it does not exhibit an opacity that appears, on an instantaneous basis, to approach the applicable opacity limit. Should the inspection show that the baghouse is malfunctioning, repairs shall be completed within five working days of discovery of the malfunction. If repairs cannot be completed within five working days, the Permittee shall advise the Control Officer in writing within 24 hours of making this determination. Should the malfunction cause the baghouse to release visible emissions over the opacity limit for the emission unit it controls, Permittee shall make repairs as soon as practicable and shall comply with the applicable requirements of AQR Section 25 and all applicable federal requirements. *[NSR – ATC/OP Modification 10, Section III-B, Condition 7, (05/22/06)]*
2. The Permittee shall conduct a monthly inspection of the following for each baghouse that operated during the prior month: (a) recording of the differential pressure across each baghouse except DC-01, DC-02, DC-03 and K4-DC-316; (b) verification of the pulse timing sequence; (c) inspection of the baghouse seals, cleaning system, and fan; and (d) external inspection of the hopper, ducting, and shell. If the inspection shows that maintenance is necessary, the permittee shall schedule and complete such maintenance within ten working days. *[NSR – ATC/OP Modification 10, Section III-B, Condition 8 (05/22/06)]*
3. Within 60 days of issuance of this permit, the Permittee shall submit an operations, maintenance and monitoring plan (OM&M) for each baghouse listed in Table III-A-2 for DAQEM approval. The OM&M plan shall, at a minimum, include the operating pressure differential range for each baghouse that is not subject to 40 CFR Part 63 Subpart AAAAA, the pulse timing sequence, and a schedule for installation of pressure gauges for each baghouse. After the performance test results have been analyzed, the Permittee may update the OM&M plan to provide ideal operational ranges for differential pressure. *[AQR 12.5.2.6(d)(1)(C)]*
4. 4. Permittee shall conduct a survey of visible emissions from all emission units in accordance to the following procedure: *[AQR 12.5.2.6(d)]*
  - a. Within 90 days of issuance of this permit, the Permittee shall submit a visual observation plan to be approved by the Control Officer. The observation plan shall identify a central lookout station or multiple observation points, as appropriate, from where emission units shall be monitored. When multiple observation points are used, all the emission units associated with each observation point shall be specifically identified within the observation plan.
  - b. A certified Method 9 observer shall conduct a biweekly (every two weeks) visual survey of visible emissions from the all emission units that are operating at the time of the survey in accordance with the observation plan.
  - c. If the observer sees a plume from an emission unit that on an instantaneous basis appears to exceed the applicable opacity standard, then the observer shall, if practicable, take a six-minute Method 9 observation of the plume.
  - d. If the six-minute opacity of the plume is less than the applicable opacity standard, the observer shall make a record of the following:

- i. Location, date, and time of the observation; and
    - ii. The results of the Method 9 observation.
  - e. If the six-minute opacity of the plume exceeds the applicable opacity standard, the Permittee shall do the following:
    - i. Adjust or repair the controls or equipment to reduce opacity to below the applicable standard;
    - ii. Report as an excess emission in accordance with Condition II.D.8; and
    - iii. Conduct a six-minute Method 9 observation reading within 48 hours after taking corrective action. The results of this observation, including date, time, and location shall be recorded.
  - f. Any changes to the observation plan, originally approved by the Control Officer, shall be made only with the prior approval of the Control Officer.
5. The Permittee shall have a standard operating procedures (SOP) manual for baghouses. The procedures specified in the manual for maintenance shall, at a minimum, include an inspection and preventative maintenance schedule that is consistent with the baghouse manufacturer's instructions, if available, for routine and long-term maintenance. All baghouses shall be operated and maintained in accordance with the SOP and good air pollution control practices. [NSR – ATC/OP Modification 10, Section III-B, Condition 6, (05/22/06)]
6. At least once every two weeks, the Permittee shall conduct visual inspections of emissions and the exterior of each operating binvent to ensure that it does not exhibit fugitive emissions or any measurable opacity. In addition, the visual inspection of binvent stack emissions shall ensure that it does not exhibit an opacity that appears, on an instantaneous basis, to approach the applicable opacity limit. Should the inspection show that the binvent is malfunctioning, repairs shall be completed within five working days of discovery of the malfunction. If repairs cannot be completed within five working days, the Permittee shall advise the Control Officer in writing within 24 hours of making this determination. Should the malfunction cause the binvent to release visible emissions over the opacity limit for the emission unit it controls, Permittee shall make repairs as soon as practicable and shall comply with the applicable requirements of AQR Section 25 and all applicable federal requirements. [NSR – ATC/OP Modification 10, Section III-B, Condition 7, (05/22/06)]
7. The Permittee shall have an SOP manual for all binvents that shall be made available to the Control Officer upon request. The procedures specified in the manual for maintenance shall, at a minimum, include an inspection and preventative maintenance schedule that is consistent with the binvent manufacturer's specifications, if available, for routine and long-term maintenance. All binvents shall be operated and maintained in accordance with the SOP and good air pollution control practices. [NSR – ATC/OP Modification 10, Section III-B, Condition 6, (05/22/06)]
8. The Permittee shall prepare and implement a written operations, maintenance, and monitoring (OM&M) plan for kilns 1 through 4 (EUs: K102, K202, K302, and K402) and the process stone handling facilities. Any subsequent changes to the plan must be submitted to the Control Officer for approval. Pending approval of the initial or amended plan, the Permittee shall comply with the provisions of the submitted plan. Each plan must contain the following information: [40 CFR 63.7100]

- a. Process and control device parameters to be monitored to determine compliance, along with established operating limits or ranges, as applicable, for each emission unit;
  - b. a monitoring schedule for each emission unit;
  - c. Process and control device parameters to be monitored to determine compliance, along with established operating limits or ranges, as applicable, for each emission unit; and
  - d. Procedures for the proper operation and maintenance of each emission unit and each air pollution control device used to meet the applicable emission limitations and operating limits.
9. The Permittee must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in §63.6(e)(3). [40 CFR 63.7100]
10. The Permittee shall monitor opacity from Process Stone Handling emission units (EUs: R108, R120, and D104a) in accordance to the following procedures: [40 CFR 63.7121(e), Table 6, Item 1]
- a. Conduct a monthly 1-minute visible emissions (VE) check of each affected source; the check shall be conducted while the affected source is in operation.
  - b. If no VE are observed in 6 consecutive monthly checks, decrease the frequency of VE checking from monthly to semi-annually; if VE are observed during any semi-annual observation, resume VE observations on a monthly basis, and maintain that schedule until no VE observations are observed in 6 consecutive monthly observations.
  - c. If no VE are observed during the semi-annual observation, decrease the frequency of VE checking from monthly to annually; if VE are observed during any annual check, resume VE observations on a monthly basis, and maintain that schedule until no VE observations are observed in 6 consecutive monthly observations.
  - d. If VE are observed during any VE observation, the Permittee shall conduct a 6-minute EPA Reference Method 9 opacity test within 1-hour of any observation of VE, and the 6-minute opacity reading shall not exceed the opacity limits in Conditions III.B.1.e and III.B.1.f.
11. The Permittee shall demonstrate continuous compliance with the PM emission standard of 0.12 lbs/tsf weighted average for all kilns. [40 CFR 63.7100]
- a. Emissions shall be calculated, at least once each month, using the following calculation:  
$$E \text{ (lbs/tsf)} = \frac{\sum E_i P_i}{\sum P_i}, \text{ where:}$$

E = Weighted average emission rate of particulate matter (PM) from all concurrently operating kilns expressed in units of lbs/ton stone feed  
E<sub>i</sub> = The most recent performance test for PM emissions from kiln *i* in units of lbs/ton of stone feed  
P<sub>i</sub> = Stone feed rate to kiln *i* in units of tons/hour
12. 11. The Permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following: [40 CFR 63.1116]

- a. Minimize gasoline spills;
  - b. Clean up spills as expeditiously as practicable;
  - c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; and
  - d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
13. Compliance with silt loading limits on paved roads, unpaved roads and unpaved parking lots shall be demonstrated by sampling and recording the results of at least one sample from each of these areas on a quarterly basis. Where more than one sample is taken from an area in a particular quarter, compliance with the applicable silt loading limit shall be based on the average of the measured samples. If twelve consecutive quarterly silt loading measurements for a given area are less than 50 percent of the applicable silt loading limit, the Permittee may reduce the frequency of future measurements for that area to annually upon prior notice to and concurrence by the Control Officer. If any subsequent annual measurement is more than 50 percent of the applicable silt loading limit, the frequency of future measurements for that area shall revert to quarterly. Annual measurements may be resumed if twelve consecutive quarterly samples are less than 50 percent of the applicable silt loading limit. *[NSR - ATC/OP Modification 10, Section III-E, Condition 5, (05/22/06)]*
14. When solid fuel, consisting of a blend of coal and coke, is being burned in kiln 1, kiln 2, and/or kiln 3, a sample of approximately one pound of the blended fuel shall be taken at least once every two hours each day from each kiln burning blended fuel. One-pound samples shall be composited into 12-pound daily samples for each kiln burning blended fuel. Approximately three to five pounds from each kiln's daily 12-pound composite sample shall be composited into a weekly sample for that kiln. The weekly samples for each kiln shall be analyzed within one week of collection for sulfur content using appropriate ASTM methods. The average of the previous calendar month of the suppliers' batch assay results for sulfur content of coal or coke may be used to determine sulfur content when only one of these fuels is being burned. *[NSR - ATC/OP Modification 10, Section III-E, Condition 6, (05/22/06)]*
15. The Permittee shall continue to calibrate, maintain, operate, and certify a COMS to monitor and record the opacity of a representative portion of the gases discharged into the atmosphere from kiln 4 in accordance with the requirements of 40 CFR 60 Subpart A and 40 CFR § 60.343 when kiln 4 is operating. The span of the COMS shall be set at 40 percent opacity. The COMS shall have an alarm set at 15 percent opacity and shall measure and average opacity in six-minute block increments starting at the beginning of each hour. The COMS and corresponding data acquisition system shall include an automated data acquisition and handling system. The COMS shall record hours of COMS operation and COMS downtime. *[NSR – ATC/OP Modification 10, Section III-G, Condition 1 (05/22/06), 40 CFR 60 Subpart A, and 40 CFR 60.343]*
16. Any average opacity greater than 15 percent, as determined by the kiln 4 COMS, may be considered an indication of a violation of the kiln 4 opacity limits of this permit and may result in an enforcement action. For purposes of establishing whether or not the Permittee has violated or is in violation of any such opacity standard, nothing herein shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether kiln 4 would have been in compliance with such opacity

standard if the applicable performance test had been performed. *[NSR – ATC/OP Modification 10, Section III-G, Condition 2 (05/22/06) and 40 CFR 60.342]*

17. If, at any time during kiln 4 operation, the Permittee discovers that COMS indicates a violation of 15 percent average opacity or that the COMS unit is malfunctioning or inoperable, a person currently certified in EPA Method 9 and knowledgeable of 40 CFR 60, Subpart HH, shall determine whether kiln 4 emissions comply with opacity limits of 40 CFR 60, Subpart HH, using visible emissions evaluation test methods and test durations contained in 40 CFR 60, Subpart HH. If the COMS indicates average opacity greater than 15 percent or is malfunctioning or inoperable at any time from 5:00 am to 2:00 pm, a visible emissions evaluation shall be started no later than three hours after the discovery. If the COMS indicates average opacity greater than 15 percent or that the COMS is malfunctioning or inoperable at any time other than 5:00 am to 2:00 pm, a visible emissions evaluation shall be started no later than three hours after the first sunrise after discovery. *[NSR – ATC/OP Modification 10, Section III-G, Condition 3, (05/22/06), 40 CFR 60.340, 60.341, 60.342, 60.343, and 60.344]*
18. The kiln COMS shall meet the following quality assurance requirements:
  - a. Calibration checks: The Permittee shall check the zero (or low-level value between 0 and 20% of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure prescribed by the manufacturer. *[40 CFR 63.8(c)(6)]*
  - b. Zero and span drift adjustments: *[40 CFR 63.8(c)(6)]*
    - i. The zero and span shall, as a minimum, be adjusted whenever the 24-hr zero drift exceeds two times the limits of the performance specifications in the relevant standard.
    - ii. For systems using automatic zero adjustments, the optical and instrumental surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4% opacity.
    - iii. The optical and instrumental surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments, except for systems using automatic zero adjustments.
  - c. System checks: The Permittee shall, as minimum procedures, apply a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. All procedures applied shall provide a system check of all analyzer internal optical surfaces and all electronic circuitry including the lamp and photodetector assembly normally used in the measurement of opacity. *[40 CFR 63.8(c)(5) and 40 CFR 63.7113(g)(2)]*
  - d. Minimum frequency of operation: Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, the COMS shall be in continuous operation and shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 10-second period, and one cycle of data recording for each successive 6-minute period. *[40 CFR 63.8(c)(4)(i)]*
  - e. Data reduction procedures: *[40 CFR 63.8(g)]*

- i. The Permittee shall reduce all data from the COMS to 6-minute averages calculated from 24 or more data points equally spaced over each 6-minute period.
  - ii. Data recorded during periods of system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero and span adjustments shall not be included in the data averages computed under the previous paragraph. An arithmetic or integrated average of all data may be used.
19. To demonstrate continuous, direct, compliance with the kiln 4 emissions limitations for NO<sub>x</sub>, CO, and SO<sub>2</sub>, as specified in Tables III-A-4 and III-B-1 of this permit, the Permittee shall continue to calibrate, maintain, operate, and certify CEMS for NO<sub>x</sub>, CO, SO<sub>2</sub>, diluent gas and stack exhaust gas on kiln 4. The CEMS shall operate at all times kiln 4 is in use, except during malfunctions, maintenance, calibration, and repairs of the CEMS. The CEMS and corresponding data acquisition system shall include an automated data acquisition and handling system. The CEMS are subject to the provisions of 40 CFR 60 Subpart A, Appendix B and F, as applicable. The CEMS shall monitor and record at least the following data: *[NSR – ATC/OP Modification 10, Section III-G, Condition 4 (05/22/06), 40 CFR 60 Subpart A and 40 CFR 60 Appendices B and F]*
  - a. exhaust gas concentration of NO<sub>x</sub>, SO<sub>2</sub>, CO and diluent O<sub>2</sub>;
  - b. exhaust gas flow rate;
  - c. three-hour rolling averages for NO<sub>x</sub>, SO<sub>2</sub>, and CO concentrations;
  - d. hourly and quarterly accumulated mass emissions of NO<sub>x</sub>, SO<sub>2</sub>, and CO;
  - e. hours of CEMS operation; and
  - f. dates and hours of CEMS downtime.
20. Any emissions greater than the NO<sub>x</sub>, SO<sub>2</sub> and CO emissions limits in Tables III-A-4 and/or III-B-1, as determined by CEMS, may be considered a violation of kiln 4 emission limits of this permit and may result in enforcement action. For purposes of establishing whether or not the Permittee has violated or is in violation of any such emissions standard during periods when CEMS is unavailable or not functioning properly, nothing herein shall preclude the use, including exclusive use, of any credible evidence or information, relevant to whether a source would have been or would not have been in compliance with the applicable emission standard if the CEMS had been in operation and functioning properly. *[NSR – ATC/OP Modification 10, Section III-G, Condition 5 (05/22/06)]*
21. For each semi-annual period, the Permittee shall submit an excess emissions report if the duration of excess emissions equals or exceeds one percent of the total source operating time, or if the duration of CEMS malfunction or downtime equals or exceeds five percent of the total source operating time. *[NSR – ATC/OP Modification 10, Section III-G, Condition 6 (05/22/06)]*
22. Required periodic audit procedures and QA/QC procedures for CEMS and COMS shall conform to the applicable provisions of 40 CFR 60. *[NSR – ATC/OP Modification 10, Section III-G, Condition 7 (05/22/06)]*

23. Relative Accuracy Test Audits (RATA) and other periodic checks of the NO<sub>x</sub>, SO<sub>2</sub>, CO, and O<sub>2</sub> CEMS shall be conducted at least annually as required by 40 CFR 60. [NSR – ATC/OP Modification 10, Section III-G, Condition 8 (05/22/06)]
24. Compliance with the provisions of 40 CFR 60 Subpart IIII contained within this document shall be demonstrated through all of the following: [40 CFR 60.4209, 4211]
  - a. Operation of the diesel engines according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer;
  - b. The keeping of records of the purchase of an engine certified according to 40 CFR 89/94 OR the keeping of records of performance test results for each pollutant for a test conducted on a similar engine OR the keeping of records of engine manufacturer data indicating compliance with the emission standards OR the keeping of records of control device vendor data indicating compliance with the emission standards OR the keeping of records of an initial performance test used to demonstrate compliance with the emission standards; and
  - c. The installation of a non-resettable hour meter.
25. Ambient Air Monitoring: The Permittee shall continue to conduct ambient air monitoring for PM<sub>10</sub> and SO<sub>2</sub> in accordance with the following: [AQR 12.5.2.6(d)]
  - a. The monitor shall be located at a location preapproved by the Control Officer.
  - b. The sampling cycle for PM<sub>10</sub> shall determine 24-hour PM<sub>10</sub> concentrations and shall be conducted on an every six-day schedule.
  - c. The sampling cycle for SO<sub>2</sub> shall determine successive non-overlapping three-hour block averages of SO<sub>2</sub> concentrations starting at midnight each calendar day.
  - d. The daily average concentration for each day of the sampling quarter, as well as quality control, preventive maintenance, and repair procedures, shall be included in the quarterly reports submitted to the Control Officer within 30 days from the end of each calendar quarter.
  - e. Failure to comply with at least one of the following is a violation of this permit condition:
    - i. QA/QC requirements of either EPA's November 3, 1995 Memorandum, *Supplemental Interim Guidance for Quality Assessment of Continuous PM<sub>10</sub> Analyzer* of the applicable provisions of 40 CFR 50, 51, 52, and 53 and associated appendices; or
    - ii. Reporting requirements of either DAQEM's Guideline on Ambient Air Monitoring or the applicable provisions of 40 CFR 50, 51, 52, and 53 and associated appendices.
  - f. ambient air monitoring shall be subject to review by the Control Officer. The Control Officer may review the air quality impact and the impacts predicted by dispersion modeling, and determine if ambient air monitoring is still required.
  - g. Quality control, preventive maintenance, and repair procedures shall be reported to the Control Officer as required by this permit.

**D. Testing**

1. The Permittee shall conduct performance tests on all emission units listed in Table III-D-1 except for EU: SP7 and EU: K402a. Performance tests shall be conducted initially and at intervals specified in Table III-D-1. *[NSR - ATC/OP Modification 10, Revision 0, Section III-B, Condition 31, (05/22/06) 40 CFR 60 Subparts OOO, HH, and Y and 40 CFR 63 Subpart AAAAA ]*

**Table III-D-1: Emissions Units Subject to Performance Testing Requirements**

EU	Description	Compliance Standard	NSPS/MACT Applicability	Performance Test	Frequency
<b>Limestone Processing</b>					
P103	HO-101/PF101	Opacity ≤ 10%	40 CFR 60 Subpart OOO	Method 9	5 Years
	BC-103				
	GR-101				
P103a	JC-102	Opacity ≤ 15%	40 CFR 60 Subpart OOO	Method 9	5 Years
P106	VS-202	Opacity ≤ 10%	40 CFR 60 Subpart OOO	Method 9	5 Years
	BC-104				
P107	VS-203	Opacity ≤ 10%	40 CFR 60 Subpart OOO	Method 9	5 Years
P109	BC-204	Opacity ≤ 10%	40 CFR 60 Subpart OOO	Method 9	5 Years
	BC-225				
P109a	CC-201	Opacity ≤ 15%	40 CFR 60 Subpart OOO	Method 9	5 Years
P112	BN-226	Opacity ≤ 10%	40 CFR 60 Subpart OOO	Method 9	5 Years
P114	BC-205	Opacity ≤ 10%	40 CFR 60 Subpart OOO	Method 9	5 Years
	BC-206				
	BC-207				
P115	BC-235	Opacity ≤ 10%	40 CFR 60 Subpart OOO	Method 9	5 Years
	BC-237				
	BC-236				
P129	Dolomite Belt	Opacity ≤ 10%	40 CFR 60 Subpart OOO	Method 9	5 Years
	BC-Future 3				
<b>Kiln Screen Running</b>					
R108	BC-15, 16	Opacity ≤ 10%	40 CFR 63 Subpart AAAAA	Method 9	5 Years
	BE-01, 02				
	BC-17				
	BC-18				
	SB-01				
	SB-02				
R117	BC-217	Opacity ≤ 10%	40 CFR 60 Subpart OOO	Method 9	5 Years
	BC-224				
	VS-229				
R120	SB-04	Opacity ≤ 10%	40 CFR 63 Subpart AAAAA	Method 9	5 Years
	BC-230				
R120a	BC-231	Opacity ≤ 10%	40 CFR 60 Subpart OOO	Method 9	5 Years

EU	Description	Compliance Standard	NSPS/MACT Applicability	Performance Test	Frequency
<b>Kilns</b>					
K102	KN-01	Opacity ≤ 15% each kiln; PM: 0.12 lbs/ton of stone feed weighted average for all four kilns	40 CFR 63 Subpart AAAAA	Method 9 and Method 5D	5 Years
K202	KN-02				
K302	KN-03				
K402	K4-KN-305	Opacity ≤ 15% Kiln 4	40 CFR 60 Subpart HH	Method 9	5 Years
<b>Solid Fuel Handling</b>					
F101	HO-40, 41	Opacity ≤ 20%	40 CFR 60 Subpart Y	Method 9	5 Years
	BC-40				
	BC-44				
	Loading Unloading				
F104	CR-40 (C)	Opacity ≤ 20%	40 CFR 60 Subpart Y	Method 9	5 Years
	SC-44				
F106	BN-41	Opacity ≤ 20%	40 CFR 60 Subpart Y	Method 9	5 Years
	BC-41				
F108	CM-41 (C)	Opacity ≤ 20%	40 CFR 60 Subpart Y	Method 9	5 Years
F110	SC-41	Opacity ≤ 20%	40 CFR 60 Subpart Y	Method 9	5 Years
	Reject Bin 1				
	Loadout				
F112	BN-42	Opacity ≤ 20%	40 CFR 60 Subpart Y	Method 9	5 Years
	BC-42				
F114	CM-42 (C)	Opacity ≤ 20%	40 CFR 60 Subpart Y	Method 9	5 Years
F116	SC-42	Opacity ≤ 20%	40 CFR 60 Subpart Y	Method 9	5 Years
	Reject Bin 2				
	Load Out				
F118	BN-43	Opacity ≤ 20%	40 CFR 60 Subpart Y	Method 9	5 Years
	BC-43				
	CM-43 (C)				
F122	SC-43	Opacity ≤ 20%	40 CFR 60 Subpart Y	Method 9	5 Years
	Reject Bin 3				
	Load Out				
F125	K4-SC-402	Opacity ≤ 20%	40 CFR 60 Subpart Y	Method 9	5 Years
	K4-BN-404				
	K4-BN-406				
	K4-WF-408				
	K4-WF-409				
	K4-BC-410				
F131	K4-CM-413 (C)	Opacity ≤ 20%	40 CFR 60 Subpart Y	Method 9	5 Years
F132	K4-SC-419	Opacity ≤ 20%	40 CFR 60	Method 9	5 Years

EU	Description	Compliance Standard	NSPS/MACT Applicability	Performance Test	Frequency
	Reject Bin 4		Subpart Y		
	Load Out				
<b>Dolomite Handling</b>					
D101	D-BN-201	Opacity ≤ 10%	40 CFR 60 Subpart OOO	Method 9	5 Years
	D-BC-202				
D104	D-BC-207	Opacity ≤ 10%	40 CFR 60 Subpart OOO	Method 9	5 Years
	D-VS-208				
D104a	D-BC-213	Opacity ≤ 10%	40 CFR 63 Subpart AAAAA	Method 9	5 Years
D105	D-BC-209	Opacity ≤ 10%	40 CFR 60 Subpart OOO	Method 9	5 Years
	D-BE-210				
	D-BN-211				
<b>Portable Screening Plant</b>					
SP3	Screen SP-3	Opacity ≤ 10%	40 CFR 60 Subpart OOO	Method 9	5 Years
	Stacker Belt				
	Stacker Belt				
	Stacker Belt				
<b>Internal Combustion Engines</b>					
SP7	218 hp Diesel Engine	CO < 230 ppmvd @ 15% O <sub>2</sub>	40 CFR 63 Subpart ZZZZ	ASTM D6522-00	Initial test only no later than October 30, 2013
K402a	123 hp Auxiliary Drive Engine (Kiln 4)	CO < 230 ppmvd @ 15% O <sub>2</sub>	40 CFR 63 Subpart ZZZZ	ASTM D6522-00	Initial test only no later than October 30, 2013

2. The Permittee shall conduct performance tests on baghouses DC-30, DC-8001, DC-5006, D-DC-4217 and at least one from each group of identical baghouses, (DC-8002, DC-8003 and DC-8004) and (DC-5001 through DC-5005 and DC-5007) to demonstrate compliance with the air flow rate to the baghouse and PM<sub>10</sub> exhaust loading identified in Table III-A-2. Subsequent performance tests shall be conducted every 5 years. The Permittee shall conduct the initial performance testing on the baghouses within 180 days from the issuance of the Operating Permit. The differential pressure gauges shall be installed, calibrated and operational prior to conducting each performance test. [AQR 12.5.2.6]
3. Kilns that have had performance tests completed and demonstrated compliance with the MACT PM emission standard of 0.12 lbs/tsf, shall be re-tested at least once every five years. [40 CFR 63.7111]
4. If any rotary kiln fails to demonstrate the PM emissions standard of 0.12 lbs/tsf, during a performance test, the Permittee shall conduct subsequent performance testing on an annual basis. [AQR 12.5.2.6 and AQR 4.5]
  - a. If the kiln demonstrates compliance with the standard for two consecutive years, the testing frequency may be increased to two years.

- b. If the kiln demonstrates compliance with the standard during two consecutive biannual tests, the testing frequency may be returned to five years.
5. Emission units that have had initial performance tests completed shall be re-tested every five years to verify on-going compliance with applicable emission limits. Repeat performance testing for any given emission unit for opacity may be a minimum of 6-minutes duration and conducted in accordance to EPA Reference Method 9 of 40 CFR 60, Appendix A. *[AQR 12.5.2.6(d) and NSR – ATC/OP Modification 10, Condition III-F-2 (05/22/2006)]*
6. Emission units identified as BC-225 (EU: P109), BC-231 (EU:R120), D-BC-209 (EU: D105), and Screen SP-3 (EU: SP3) shall be tested annually. Repeat performance testing for any given emission unit for opacity may be a minimum of 6-minutes duration and conducted in accordance to EPA Reference Method 9 of 40 CFR 60, Appendix A. *[AQR 12.5.2.6(d)]*
7. Visible emissions evaluations for emission units whose performance test consists of or includes opacity observations shall be conducted by a person or persons certified in EPA Method 9 at the time of the visible emissions evaluations. *[NSR - ATC/OP Modification 10, Section III-F, Condition 3, (05/22/06)]*
8. The Permittee of a new, modified or reconstructed emission unit for which an initial performance testing is required by this section shall conduct an initial performance test within 60 days after achieving the maximum production rate at which the emission unit will be operated, but not later than 180 days after initial startup of such emission unit. The Permittee shall demonstrate the emission unit's compliance with emission limitations established in the operating permit. *[40 CFR 60.8]*
9. The Permittee shall submit for approval performance and/or RATA test protocols which include proposed test methods, anticipated test dates, reporting, and notification schedules to the Control Officer at least 45 days, but not more than 90 days, prior to the anticipated date of the performance test. The Control Officer reserves the right to witness any performance test. *[NSR - ATC/OP Modification 10, Section III-F, Condition 4, (05/22/06)]*
10. The Permittee shall demonstrate compliance with a CO concentration limit of the diesel powered generator (EU SP7) of 230 ppmvd or less at 15% O<sub>2</sub> within 180 days after May 3, 2013. *[40 CFR 63.6603(a), 6612, and 6595]*
11. The Permittee shall submit a report describing the results of the performance test to the Control Officer within 60 days from the end of the performance test. *[40 CFR 60 Subparts OOO, HH, and Y and 40 CFR 63 Subpart AAAAA]*

#### **E. Record Keeping**

1. The Permittee shall maintain records on site that require semi-annual reporting and include, at a minimum: *[NSR - ATC/OP Modification 10, Revision 0, Section III-H, Condition 7, (05/22/06), 40 CFR 63, Subparts AAAAA and CCCCC ]*
  - a. average daily and consecutive 12-month rolling totals of materials mined;
  - b. average daily quantities of blasting materials used;
  - c. average daily throughputs for each kiln;
  - d. average daily throughputs of coal and coke in each kiln;
  - e. monthly calculation of PM emissions from rotary kilns to demonstrate compliance with Permit Condition II-C-9;

- f. inspection report for each baghouse;
  - g. monthly calculation of consecutive 12-month rolling totals of natural gas used by the Apex facility;
  - h. the average calculated daily, semi-annual and consecutive 12 month consumption of natural gas throughput in each kiln and by the atmospheric hydrator baghouse burner (EU: H105);
  - i. average daily, semi-annual, and consecutive 12 month throughput for a portable screening plant;
  - j. hours of operation of the internal combustion engines (EUs: SP7; TL3, K102a, K202a, K302a, and K402a)
  - k. a record of the annual emissions calculated for each of the internal combustion units (EUs: SP7, TL3, K102a, K202a, K302a, K402a)
  - l. throughput of gasoline in the 1,000-gallon gasoline tank;
  - m. of diesel fuel in the 10,000-gallon diesel fuel tank;
  - n. results of ambient air monitoring
  - o. quality assurance and quality control requirements for the on-site ambient air quality monitoring.
  - p. daily operating hours of kiln 4;
  - q. times and duration of CEMS downtime or malfunction time on kiln 4;
  - r. times and duration of periods of excess emissions as determined by CEMS;
  - s. nature and probable cause of any CEMS downtime and corrective actions taken;
  - t. records of COMS data, including quality assurance/quality control results;
  - u. times and duration of COMS downtime;
  - v. nature and probable cause of any COMS downtime and corrective actions taken;
  - w. the magnitude and duration of excess emissions, notifications, monitoring system performance, malfunctions, corrective actions taken, and other data required by 40 CFR 60, and the CEMS Quality Assurance Plan;
  - x. CEMS audit results or accuracy checks, as required by 40 CFR 60 and the CEMS Quality Assurance Plan.
2. The Permittee shall maintain records on site and include, at a minimum: *[NSR - ATC/OP Modification 10, Revision 0, Section III-H, Condition 7, (05/22/06), 40 CFR 63, Subparts AAAAA and CCCCC ]*
- a. determinations of sulfur contents of coal and coke for kilns 1, 2, and 3 based on fuel analysis, and supplier's data;
  - b. determinations of sulfur contents of natural gas based on suppliers' data;
  - c. sulfur content of diesel fuel;
  - d. cetane index or aromatic content (in percent by volume) of diesel fuel;
  - e. increases in the total acreage of active and inactive open storage areas for open storage areas listed as EUs: A101, A102, A103, A104, A105, A106, A107, A108, A108a, A109, A109a, A109b, A110a, and A110b, inclusive;
  - f. records of dust control measures applied to paved surfaces areas within the plant, paved haul roads, unpaved haul roads, unpaved parking lots and vacant areas;

- g. results of moisture content sampling;
  - h. results of silt loading sampling;
  - i. results of baghouse inspections for visible emissions and baghouse exteriors;
  - j. results of monthly baghouse inspections for baghouse mechanical performance;
  - k. SOP for baghouse preventative maintenance;
  - l. records that demonstrate training within the past 24 months of on-site personnel in EPA Method 9;
  - m. results of any performance test conducted within the previous five years or whenever the last test was conducted;
  - n. emergency plan in the event of an air quality emergency as required by AQR Section 70;
  - o. copy of each notification and report that was submitted as required by this Section, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirements in §63.10(b)(2)(xiv). [40 CFR §63.7132(a)(1)];
  - p. records of all COM data, including records of installation, maintenance, and calibration. [40 CFR 63.7132(c) Table 5, Item 4];
  - q. records specified in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. [40 CFR §63.7132(a)(2)]; and
  - r. records which document the basis for initial 40 CFR 63 Subpart AAAAA applicability determination as required under §63.7081. [40 CFR 63.7132(d)]
3. For all inspections, visible emission checks, and testing required under the monitoring section of this permit, logs, reports, and records shall include at least the date and time, the name of the person performing the action, the results or findings, and the type of corrective action taken (if required). [AQR 12.5.2.6(d)(2)/19.4.1.3(b)]
4. Records and data required by this operating permit to be maintained by Permittee may, at the Permittee's expense, be audited at any time by a third party selected by the Control Officer. [NSR - ATC/OP Modification 10, Section III-E, Condition 1, (05/22/06) and AQR 4.2]
5. Should this stationary source, as defined in 40 CFR 68.3, become subject to the accidental release prevention regulations in Part 68, then the Permittee shall submit an RMP by the date specified in Section 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR 70 or 71. [AQR 12.5.2.6(d)(4)(B), 40 CFR 68.3]
6. All records and logs, or a copy thereof, shall be kept on-site for a minimum of five (5) years from the date the measurement was taken or data was entered and shall be made available to the Control Officer upon request. [NSR - ATC/OP Modification 10, Section III-H, Conditions 1 & 2, (05/22/06),
7. The Control Officer reserves the right to require additional records or records to verify compliance with the permit. [[NSR - ATC/OP Modification 10, Section III-H, Condition 3, (05/22/06)]

## **F. Reporting**

1. All report submissions shall be addressed to the attention of the Control Officer. [AQR 22.4]
2. All reports shall contain the following: [AQR 12.5.2.4]
  - a. a certification statement on the first page, i.e., “I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this document are true, accurate and complete.”; and
  - b. a certification signature from a responsible official of the company and the date certification.
3. The Permittee shall submit semi-annual monitoring reports to the Control Officer. [AQR 12.5.2.6(d)(4)(A)]
4. The Permittee shall submit all of the notifications in 40 CFR 63.6(h)(4), and (5); 63.7(b) and (c); 63.8(e), f(4) and (6); and 63.9(a) through (j) that apply. [40 CFR 63.7130]
5. The following requirements apply to semi-annual reports: [AQR 12.5.2.6(d)(4)(A)]
  - a. The report shall include records specified in Section III-E-1 of this permit;
  - b. The reports shall cover the semi-annual reporting period from January 1 through June 30 or the semi-annual reporting period from July 1 through December 31.
  - c. The report shall be received by the Control Officer within 30 calendar days after the semi-annual calendar period. Regardless of the date of issuance of this operating permit, the source shall comply with the schedule for report submissions outlined in Table III-F-1.

**Table III-F-1: Required Submission Dates for Various Reports**

Required Report	Applicable Period	Due Date <sup>1</sup>
Semi-annual Report for 1st Six-Month Period	January, February, March, April, May, June	July 30 each year
Semi-annual Report for 2 <sup>nd</sup> Six-Month Period, Any additional annual records required.	July, August, September, October, November, December	January 30 each year
Annual Compliance Certification Report	Calendar Year	January 30 each year
Annual Emission Inventory Report	Calendar Year	March 31 each year
Excess Emission Notification	As Required	Within 24 hours of first learning of the excess emissions
Excess Emission Report	As Required	Within 72 hours of the Excess Emission Notification.
Deviation Report	As Required	Along with semi-annual reports
Performance Testing	As Required	Within 60 days from the end of the test.

<sup>1</sup> Each report shall be received by Control Officer on or before the due date listed. If the due date falls on a Saturday, Sunday or a Federal or Nevada holiday, then the submittal is due on the next regularly scheduled business day.

6. The Permittee shall, in addition to the annual compliance certification required in this section, submit semi-annual compliance certification reports to the Administrator and to the Control Officer detailing the compliance status with the 40 CFR §63 Subpart AAAAA requirements by January 31 for the reporting period July 1 through December 31, and by

July 31 for the reporting period January 1 through June 30 of each year. [40 CFR §63.7131]

The semi-annual compliance certification shall include the following information: [40 CFR 63.7131(c), 63.7131(d), 63.7131(e)]

- a. Company name and address.
- b. Statement by the responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If the facility had a startup, shutdown or malfunction during the reporting period and the Permittee took actions consistent with the SSMP, the compliance report shall include the information in §63.10(d)(5)(i).
- e. If there were no deviations from any emission limitations (emission limit, operating limit, opacity limit, and VE limit) that apply to the facility, the compliance report shall include a statement that there were no deviations from the emission limitations during the reporting period.
- f. If there were no periods during which the continuous monitoring systems (CMS) were out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CMS were out-of-control during the reporting period. [40 CFR 63.7131(a) Table 7, Item 2]
- g. If there was a deviation from an emission limitation at an affected source where the Permittee is not using a CMS to comply with the emission limitations, the compliance report shall contain the following information: [40 CFR 63.7131(d)]
  - (i) The total operating time of each emission unit during the reporting period.
  - (ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- h. If there was a deviation from an emission limitation at an affected source where the Permittee is using a CMS to comply with the emission limitations, the compliance report shall contain the following information: [40 CFR 63.7131(e)]
  - (i) The date and time that each malfunction started and stopped.
  - (ii) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
  - (iii) The date, time and duration that each CMS was out-of-control, including the information in §63.8(c)(8).
  - (iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
  - (v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total affected source operating time during that reporting period.
  - (vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
  - (vii) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total emission unit operating time during that reporting period.

- (viii) A brief description of the process units.
- (ix) A brief description of the CMS.
- (x) The date of the latest CMS certification or audit.
- (xi) A description of any changes in CMS, processes, or controls since the last reporting period.

7. The Control Officer reserves the right to require additional reports and reporting to verify compliance with permit conditions, permit requirements, and requirements of applicable federal regulations. *[NSR - ATC/OP Modification 10, Section III-I, Condition 10, (05/22/06)]*

**G. Mitigation**

1. The source has no federal offset requirements. *[AQR 59.1.1]*

**H. Alternate Operating Scenarios**

1. The maximum horsepower rating shall not exceed 218 hp for EU SP7 and 80 hp for EU TL3. *[NSR – ATC/OP Modification 10, Table II-A-2 (5/22/06)]*

2. Permittee may replace the EU SP7 and EU TL3 with smaller horsepower rating engines than specified in condition III-H-1 by recording the following information in a log maintained at the Permittee’s facility: *[AQR 12.5.2.6(j)]*

- a. The emission unit being replaced and the date when the emission unit will be installed;
- b. The horsepower rating, year of construction, and a listing of the applicable requirements of the AQR, 40 CFR 60 Subpart IIII, and 40 CFR 63 Subpart ZZZZ that apply to the new engine; and
- c. The emissions factors and emissions rates expressed in units of pounds/hour of CO, NOx, VOC, SO<sub>2</sub>, and PM<sub>10</sub> of the replacement engine.

**IV. OTHER REQUIREMENTS**

None

**APPENDIX**

**A. OPACITY LIMITS**

1. The emission units itemized in Table VII-A-1 are subject to the federal NSPS and NESHAP requirements of the identified applicable Subparts. *[40 CFR Part 60 Subparts A, Y, HH, and OOO and 40 CFR 63 Subpart AAAAA]*

**Table A-1: NSPS and NESHAP Applicability**

EU	Description	Applicable Subpart	Opacity Limits
P103	BC-103 Closed Stone Transfer Point	Subpart A, Subpart OOO	10%

EU	Description	Applicable Subpart	Opacity Limits
P106	BC-104 Closed Stone Transfer Point	Subpart A, Subpart OOO	10%
	VS-202 Screening Stone	Subpart A, Subpart OOO	10%
P107	VS-203 Screening Stone	Subpart A, Subpart OOO	10%
P110	BC-204 Closed Stone Transfer Point	Subpart A, Subpart OOO	10%
	CC-201 Crushing Stone	Subpart A, Subpart OOO	15%
	BC-225 Closed Stone Transfer Point	Subpart A, Subpart OOO	10%
P112	BN-226 Closed Stone Transfer Point	Subpart A, Subpart OOO	10%
P114	BC-205 Closed Stone	Subpart A, Subpart OOO	10%
	BC-206 Closed Stone Transfer Point	Subpart A, Subpart OOO	10%
	BC-207 Open Stone Transfer Point	Subpart A, Subpart OOO	10%
	BC-209 Closed Stone Transfer Point	Subpart A, Subpart OOO	10%
	BC-210 Open Stone Transfer Point	Subpart A, Subpart OOO	10%
P115	BC-236 Closed Stone Transfer Point	Subpart A, Subpart OOO	10%
	BC-237 Open Stone Transfer Point	Subpart A, Subpart OOO	10%
	BC-208 Closed Stone Transfer Point	Subpart A, Subpart OOO	10%
	BC-235 Open Stone Transfer Point	Subpart A, Subpart OOO	10%
	BC-Coarse 2	Subpart A, Subpart OOO	10%
P129	BC-Future 3 Open Stone Transfer Point	Subpart A, Subpart OOO	10%
	Dolomite Belt Open Stone Transfer Point	Subpart A, Subpart OOO	10%
R117	BC-217 Closed Stone Transfer Point	Subpart A, Subpart OOO	10%
	BC-224 Closed Stone Transfer Point	Subpart A, Subpart OOO	10%
	VS-229 Screening Stone	Subpart A, Subpart OOO	10%
R120a	BC-231 Closed Stone Transfer Point	Subpart A, Subpart OOO	10%
R120	BC-230 Closed Stone Transfer Point	Subpart A, Subpart OOO	10%
	SB-04 Closed Stone Transfer Point	40 CFR 63 Subpart AAAAA	10%
K402	K4-KN-305 Rotary Kiln 4	Subpart A, Subpart HH 40 CFR 63 Subpart AAAAA	15%
D101	D-BN-201 Open Stone Transfer Point	Subpart A, Subpart OOO	10%
	D-BC-202 Open Stone Transfer Point	Subpart A, Subpart OOO	10%
D104	D-BC-207 Open Stone Transfer Point	Subpart A, Subpart OOO	10%
	D-VS-208 Screening Stone	Subpart A, Subpart OOO	10%
D104a	D-BC-213 Open Stone Transfer Point	Subpart A, Subpart OOO [40 CFR 63 Subpart AAAAA]	10%
D105	D-BC-209 Open Stone Transfer Point	Subpart A, Subpart OOO	10%
	D-BE-210 Open Stone Transfer Point	Subpart A, Subpart OOO	10%
	D-BN-211 Open Stone Transfer Point	Subpart A, Subpart OOO	10%
F101	HO-40, 41 Fuel Transfer	Subpart A, Subpart Y	20%
	BC-40 Fuel Transfer	Subpart A, Subpart Y	20%
	BC-44 Fuel Transfer	Subpart A, Subpart Y	20%
	Loader Loading Fuel Transfer	Subpart A, Subpart Y	20%
	Loader Unloading Fuel Transfer	Subpart A, Subpart Y	20%
F104	CR-40 Fuel Crushing	Subpart A, Subpart Y	20%

EU	Description	Applicable Subpart	Opacity Limits
F106	SC-44 Fuel Transfer	Subpart A, Subpart Y	20%
	BN-41 Bin Feeding	Subpart A, Subpart Y	20%
	BC-41 Fuel Transfer	Subpart A, Subpart Y	20%
F108	CM-41 Crushing Fuel	Subpart A, Subpart Y	20%
F109	SC-41 Fuel Transfer	Subpart A, Subpart Y	20%
	Reject Bin 1 Bin Feeding	Subpart A, Subpart Y	20%
	Reject Bin 1 Loadout Fuel Transfer	Subpart A, Subpart Y	20%
F112	BN-42 Bin Feeding	Subpart A, Subpart Y	20%
	BC-42 Fuel Transfer	Subpart A, Subpart Y	20%
F114	CM-42 Crushing Fuel	Subpart A, Subpart Y	20%
F116	SC-42 Fuel Transfer	Subpart A, Subpart Y	20%
	Reject Bin 2 Bin Feeding	Subpart A, Subpart Y	20%
	Reject Bin 2 Loadout Fuel Transfer	Subpart A, Subpart Y	20%
F118	BN-43 Bin Feeding	Subpart A, Subpart Y	20%
	BC-43 Fuel Transfer	Subpart A, Subpart Y	20%
	CM-43 Crushing Fuel	Subpart A, Subpart Y	20%
F122	SC-43 Fuel Transfer	Subpart A, Subpart Y	20%
	Reject Bin 3 Bin Feeding	Subpart A, Subpart Y	20%
	Reject Bin 3 Loadout Fuel Transfer	Subpart A, Subpart Y	20%
F125	K4-SC-402 Fuel Transfer	Subpart A, Subpart Y	20%
	K4-BN-404 Bin Feeding	Subpart A, Subpart Y	20%
	K4-BN-406 Bin Feeding	Subpart A, Subpart Y	20%
	K4-WF-408 Fuel Transfer	Subpart A, Subpart Y	20%
	K4-WF-409 Fuel Transfer	Subpart A, Subpart Y	20%
	K4-BC-410 Fuel Transfer	Subpart A, Subpart Y	20%
F131	K4-CM-413 Fuel Crushing	Subpart A, Subpart Y	20%
F132	K4-SC-419 Fuel Transfer	Subpart A, Subpart Y	20%
	Reject Bin 4 Bin Feeding	Subpart A, Subpart Y	20%
	Reject Bin 4 Loadout Fuel Transfer	Subpart A, Subpart Y	20%

2. The emission units itemized in Table VII-A-2 are subject to the AQR requirements of Section 26. [AQR 26.1 and 26.1.1]

**Table A-2: Section 26 and 40 CFR 63 Subpart AAAAA Applicability**

EU	Description	Opacity Limits
Q101	Mining Ore (1945)	20%
	Mining Low Grade Ore/Overburden (1945)	20%
P103	HO-101/PF-101 Open Stone Transfer Pt (1945)	20%
	GR-101 Open Stone Transfer Point (1945)	20%
	JC-102 Crushing Stone (1945)	20%
P129	Loader Loading (dolomite) (1998)	20%
	Loader Unloading (dolomite) (1998)	20%
R101	BC-11 Closed Stone Transfer Pt (underground) (1957)	20%

EU	Description	Opacity Limits
	BC-12 Closed Stone Transfer Point (1968)	20%
	BC-13 Closed Stone Transfer Point (1968)	20%
	VS-04 Screening Stone (1968)	20%
R106	BC-14 Closed Stone Transfer Point (1968)	20%
	BN-05 Closed Stone Transfer Point (1968)	20%
	BN-05 Loadout Open Stone Transfer Pt (1968)	20%
R108	BC-15, 16 Closed Stone Transfer Point (1957) 40 CFR 63 Subpart AAAAA	10%
	BE-01, 02 Closed Stone Transfer Point (1957) 40 CFR 63 Subpart AAAAA	10%
	BC-17 Closed Stone Transfer Point (1968) 40 CFR 63 Subpart AAAAA	10%
	BC-18 Closed Stone Transfer Point (1968) 40 CFR 63 Subpart AAAAA	10%
	SB-01 Closed Stone Transfer Point (1957) 40 CFR 63 Subpart AAAAA	10%
	SB-02 Closed Stone Transfer Point (1957) 40 CFR 63 Subpart AAAAA	10%
	SB-03 Closed Stone Transfer Point (1968) 40 CFR 63 Subpart AAAAA	10%
K102	PH-01 Closed Stone Transfer Pt (baghouse) (1957) 40 CFR 63 Subpart AAAAA	15%
	KN-01 Rotary Kiln 1 (baghouse DC-01) (1957) 40 CFR 63 Subpart AAAAA	15%
	CO-01 Cooler (baghouse DC-01) (1957) 40 CFR 63 Subpart AAAAA	15%
K102a	Auxiliary Kiln Drive Diesel Engine (1999)	20%
K104	SC-01 Lime Transfer (baghouse DC-20) (1957)	20%
	SC-02 Lime Transfer (baghouse DC-20) (1957)	20%
	BE-03 Lime Transfer (baghouse DC-20) (1991)	20%
K106	BN-06 Bin Feeding (1957)	20%
	BN-06 Loadout (1957)	20%
K110	SC-04 Dust Transfer (sealed) (1991)	20%
	SC-05 Dust Transfer (sealed) (1991)	20%
	SC-07 Dust Transfer (sealed) (1991)	20%
	SC-08 Dust Transfer (baghouse DC-01) (1972)	20%
	BE-06 Dust Transfer (sealed) (1985)	20%
	SC-15 Dust Transfer (sealed) (1985)	20%
K114	BN-09 Bin Feeding (baghouse DC-04) (1985)	20%
	BN-09 Loadout (baghouse DC-04) (1985)	20%
K202	PH-02 Closed Stone Transfer Pt (baghouse DC-02) (1957) 40 CFR 63 Subpart AAAAA	15%
	KN-02 Rotary Kiln 2 (baghouse DC-02) (1957)	15%
	CO-02 Cooler (baghouse DC-02) (1957)	15%
K202a	Auxiliary Kiln Drive Diesel Engine	20%
K204	SC-02 Lime Transfer (baghouse DC-30) (1957)	20%
	BE-04 Lime Transfer (baghouse DC-30) (1991)	20%
K206	BN-07 Bin Feeding (1957)	20%
	BN-07 Loadout (1957)	20%
K208	SC-06 Dust Transfer (baghouse DC-02) (1991)	20%
	SC-09 (sealed) (1972)	20%

EU	Description	Opacity Limits
	SC-13 (sealed) (1972)	20%
	BE-07 (sealed) (1972)	20%
	SC-16 (sealed) (1972)	20%
K213	BN-10 Bin Feeding (baghouse DC-05) (1972)	20%
	BN-10 Loadout (baghouse DC-05) (1972)	20%
K215	DA-BN-502 Bin Feeding (bin vent DA-DC-507) (1994)	20%
	DA-SC-505 Dust Transfer (sealed) (1994)	20%
	DA-SC-506 Dust Transfer (sealed) (1994)	20%
K302	PH-03 Closed Stone Transfer Pt (baghouse DC-03) (1968) 40 CFR 63 Subpart AAAAA	15%
	KN-03 Rotary Kiln 3 (baghouse DC-03) (1968) 40 CFR 63 Subpart AAAAA	15%
	CO-03 Cooler (baghouse DC-03) (1968) 40 CFR 63 Subpart AAAAA	15%
K302a	Auxiliary Kiln Drive Diesel Engine	20%
K304	SC-03 Lime Transfer (sealed) (1968)	20%
	SC-04 Lime Transfer (sealed) (1968)	20%
K306	BN-08 Bin Feeding (1968)	20%
	BN-08 Loadout (1968)	20%
K308	BN-18 Bin Feeding (baghouse DC-03) (1968)	20%
	SC-18 Dust Transfer (baghouse DC-03) (1968)	20%
	SC-18 Loadout (baghouse DC-03) (1968)	20%
	SC-11, 12 Dust Transfer (sealed) (1972)	20%
K402	K4-PH-302 Closed Stone Transfer Pt (baghouse) (1996) 40 CFR 63 Subpart AAAAA	7%
	K4-CO-309 Cooler (baghouse K4-DC-340) (1996) 40 CFR 63 Subpart AAAAA	15%
K402a	Auxiliary Kiln Drive Diesel Engine	20%
K404	K4-BC-501 Lime Transfer (1996)	20%
	K4-BE-502 Lime Transfer (1996)	20%
	K4-BC-503 Lime Transfer (1996)	20%
	K4-BC-504 Lime Transfer (1996)	20%
K408	K4-BN-338 Bin Feeding (bin filter receiver K4-DC-336)(1996)	20%
	K4-BN-338 Loadout (bin vent K4-DC-509) (1996)	20%
K410	Emergency Dump (loadout) (1996)	20%
	Emergency Dump Reclaim Lime Transfer (1996)	20%
K412	K4-SC-326 Dust Transfer (sealed) (1996)	20%
	K4-SC-327 Dust Transfer (sealed) (1996)	20%
	K4-SC-328 Dust Transfer (sealed) (1996)	20%
	K4-SC-329 Dust Transfer (sealed) (1996)	20%
K412	K4-BE-330 Dust Transfer (sealed) (1996)	20%
K417	K4-BN-508 Bin Feeding (bin vent K4-DC-509) (1996)	20%

EU	Description	Opacity Limits
	K4-BN-508 Bin Loadout (1996)	20%
K418	K4-PM-514 Dust Transfer (1996)	20%
	K4-PM-514 Loadout (1996)	20%
	K4-SC-342 Dust Transfer (1996)	20%
L101	SC-24 Lime Transfer (1991)	20%
	SC-25 Lime Transfer (sealed) (1991)	20%
	BC-505/BC-20 Lime Transfer (baghouse DC-20) (1957)	20%
	BE-20 Lime Transfer (baghouse DC-20)(1957)	20%
L105	K4-BN-518 Bin Feeding (binvent K4-DC-519) (1996)	20%
	K4-SC-524 Lime Transfer (1996)	20%
L108	HM-20 Crushing Product (sealed) (1986)	20%
L110	VS-20 Screening Product (baghouse DC-20) (1957)	20%
	SI-02 Bin Feeding (baghouse DC-20) (1957)	20%
	SC-21 Lime Transfer (sealed) (1957)	20%
L112	SI-01 Bin Feeding (baghouse DC-20) (1957)	20%
	SC-23 Lime Transfer (sealed) (1957)	20%
	SC-26 Lime Transfer (sealed) (1957)	20%
L116	SI-06 Bin Feeding (baghouse DC-20) (1957)	20%
	SC-27 Lime Transfer (sealed) (1957)	20%
L118	SI-07 Bin Feeding (baghouse DC-20) (1957)	20%
	SC-28 Lime Transfer (baghouse DC-20) (1968)	20%
	SC-20 Dust Transfer (sealed) (1986)	20%
L201	K4-BC-506 Lime Transfer (baghouse DC-30) (1968)	20%
	SC-30 Lime Transfer (sealed) (1972)	20%
	K4-BC-507 Lime Transfer (baghouse DC-30)(1968)	20%
	BE-30 Lime Transfer (1968)	20%
	BC-32 Lime Transfer (1968)	20%
L206	CR-30 Crushing Product (baghouse DC-36) (1968)	20%
	BE-31 Lime Transfer (baghouse DC-36) (1968)	20%
	VS-30 Screening Product (baghouse DC-36) (1968)	20%
L208	SI-04 Bin Feeding (enclosed) (1968)	20%
	SI-03 Bin Feeding (enclosed) (1957)	20%
	SI-08 Bin Feeding (baghouse DC-35) (1957)	20%
	SI-11 Bin Feeding (1968)	20%
	SI-09 Bin Feeding (enclosed) (1968)	20%
	SI-10 Bin Feeding (enclosed) (1968)	20%
L209	SC-38 Lime Transfer (sealed) (1968)	20%
	SC-39 Lime Transfer (sealed) (1968)	20%
	SC-38A Lime Transfer (sealed) (1968)	20%
	SC-37 Lime Transfer (sealed) (1995)	20%
	SC-36 Lime Transfer (sealed) (1995)	20%
	SC-40 Dust Transfer (sealed) (1995)	20%
	SC-41 Dust Transfer (sealed) (1995)	20%

EU	Description	Opacity Limits
L224	BC-37 Lime Transfer (1995)	20%
	BC-37 Loadout (1995)	20%
H101	SC-101 Hydrate Transfer (sealed) (1990)	20%
H102	Small Bin Feeding (enclosed) (1990)	20%
	SC-105 Hydrate Transfer (sealed) (1990)	20%
H105	MX-106 Hydrate Transfer	20%
	HY-107 Hydrator	20%
	SC-111 Hydrate Transfer	20%
H108	BE-113 Hydrate Transfer	20%
	VS-115 Screening Product	20%
	SC-117 Hydrate Transfer	20%
H109	CR-116 Crushing Product	20%
H110	SC-119 Hydrate Transfer	20%
H116	SC-118 Hydrate Transfer	20%
	BE-120 Hydrate Transfer	20%
	SC-121 Hydrate Transfer	20%
D201	D-HM-510 Crushing Product	20%
D202	D-SC-511 Lime Transfer	20%
	D-SC-512 Lime Transfer	20%
	D-SC-513 Lime Transfer	20%
	D-SC-514 Lime Transfer	20%
	D-SC-515 Lime Transfer	20%
D208	D-SC-516 Lime Transfer	20%
	D-BN-518, 519 Bin Feeding	20%
D211	D-BC-503 Lime Transfer	20%
	D-BN-504 Bin Feeding	20%
	D-SC-508 Lime Transfer	20%
O101	Ore Spillage Open Stone Transfer Point	20%
	Ore Spillage Reclaim	20%
	Ore Reclaim Unloading	20%
	Product Spillage Lime Transfer	20%
	Product Spillage Reclaim Lime Transfer	20%
	Product Reclaim Unloading	20%
O107	Kiln 1-3 Dump/Bypass Lime Transfer	20%
	Kiln 1-3 Dump/Bypass Reclaim Lime Transfer	20%
	Kiln 1-3 Dump/Bypass Unloading	20%
SP1	Hopper Loading and Unloading	20%
	Conveyor Belt SP-2	20%
SP3	Screen SP-3	20%
	Stacker Belt	20%
	Stacker Belt	20%

EU	Description	Opacity Limits
	Stacker Belt	20%
SP7	218 hp Diesel-Fueled Generator	20%
TL1	Railcar Unloading (baghouse) (1999)	20%
TL3	80 hp Diesel-Fueled Generator (1999)	20%
A01	Quarry Areas (active)/(inactive) (1945)	20%
	Limestone at Hopper (active)/(inactive)(1945)	20%
	Fine Kiln-Feed Stockpile (active)/(inactive) (1996)	20%
	Coarse Kiln-Feed Stockpile (active)/(inactive) (1945)	20%
	Glass Flux Feed Stockpile (active)/(inactive) (1996)	20%
	Kiln 4 Chat Stockpile (active)/(inactive) (1996)	20%
	Chat Stockpile (active)/(inactive) (1945)	20%
	Solid Fuel Stockpile (active)/(inactive) (1975)	20%
	Dolomite Stockpile (active)/(inactive) (1995)	20%
	Solid Fuel Storage (1975)	20%
	Fine Dolomite Stockpile (1998)	20%
	Coarse Dolomite Stockpile (1998)	20%
	Portable Screening Plant Stockpiles (new)	20%
V01	Unpaved Haul Roads	20%
V02	Paved Import/Shipping Roads	20%
V03	Unpaved Reject Material Removal Exit Road	20%
V04	Paved Lime Plant Roads	20%
V05	Unpaved Lime Plant Roads	20%
V06	Dozer Travel on Paved Road	20%
P112	BN-226 Loadout Open Stone Transfer Pt (1996)	20%
D105	D-BN-211 Loadout (1995)	20%
LD4	Loader Loading (new)	20%
	Loader Unloading (new)	20%

**B. APPLICABLE REGULATIONS**

1. NRS, Chapter 445B.
2. Applicable AQR Sections:

**Table B-1: Applicable AQR Sections**

Citation	Title
AQR Section 00	Definitions (11/16/2010)
AQR Section 2	Air Pollution Control Board (8/27/1981)
AQR Section 4	Control Officer (7/01/2004)
AQR Section 5	Interference with Control Officer (7/01/2004)
AQR Section 6	Injunctive Relief (7/01/2004)
AQR Section 7	Hearing Board and Hearing officer (4/01/2001)

Citation	Title
AQR Section 8	Persons Liable for Penalties – Punishment Defense (7/01/2004)
AQR Section 9	Civil Penalties (7/01/2004)
AQR Section 10	Compliance Schedules (7/01/2004)
AQR Section 11	Ambient Air Quality Standards (9/07/2004)
AQR Section 12.0	Applicability, General Requirements and Transition Procedures (7/01/2010)
AQR Section 12.2	Permit Requirements for Major Sources in Attainment Areas (Prevention of Significant Deterioration) (07/01/2010)
AQR Section 12.3	Permit Requirements for Major Sources in Nonattainment Areas (7/01/2010)
AQR Section 12.4	Authority to Construct Application and Permit Requirements for Part 70 Sources (7/01/2010)
AQR Section 12.5	Part 70 Operating Permit Requirements (7/01/2010;)
AQR Section 12.6	Confidentiality (7/01/2010)
AQR Section 12.7	Emission Reduction Credits (7/01/2010)
AQR Section 12.9	Annual Emissions Inventory Requirement (7/01/2010)
AQR Section 12.10	Continuous Monitoring Requirement for Stationary Sources (7/01/2010)
AQR Section 12.12	Transfer of Permit (7/01/2010)
AQR Section 12.13	Posting of Permit (7/01/2010)
AQR Section 13	National Emission Standards for Hazardous Air Pollutants (7/01/2010)
AQR Section 14	New Source Performance Standards (7/01/2010)
AQR Section 18	Permit and Technical Service Fees (4/02/2011)
AQR Section 19	40 CFR Part 70 Operating Permits
AQR Section 25.1 & 25.2	Requirements for the excess emissions caused by upset/breakdown and malfunctions (7/01/2010)
AQR Section 26	Emissions of Visible Air Contaminants (12/30/2008)
AQR Section 27	Particulate Matter from Process Weight Rate (7/01/2004)
AQR Section 28	Fuel Burning Equipment (7/01/2004)
AQR Section 29	Sulfur Contents of Fuel Oil (7/01/2004)
AQR Section 35	Diesel Engine Powered Electrical Generating Equipment (7/01/2004)
AQR Section 40	Prohibition of Nuisance Conditions (7/01/2004)
AQR Section 41.1	Fugitive Dust (7/01/2004)
AQR Section 43	Odors in the Ambient Air (7/01/2004)
AQR Section 45	Idling of Diesel Powered Motor Vehicles (7/01/2004)
AQR Section 50	Storage of Petroleum Products (7/01/2004)
AQR Section 52	Gasoline Dispensing Facilities (7/01/2004)

Citation	Title
AQR Section 60	Evaporation and Leakage (7/01/2004)
AQR Section 70	Emergency Procedures (7/01/2004)
AQR Section 80	Circumvention (7/01/2004)
AQR Section 81	Provisions of Regulations Severable (7/01/2004)

3. CAAA, Authority: 42 U.S.C. § 7401, et seq.

4. Applicable 40 CFR Subsections:

**Table B-2: Applicable 40 CFR Subsections**

Citation	Title
40 CFR 52.21	Prevention of Significant Deterioration (PSD)
40 CFR 52.1470	SIP Rules
40 CFR 60, Subpart A	Standards of Performance for New Stationary Sources (NSPS) – General Provisions
40 CFR 60	Appendices A, B, and F
40 CFR 60 Subpart Y	Standards of Performance for Coal Preparation Plants
40 CFR 60 Subpart HH	Standards of Performance for Lime Manufacturing Plants
40 CFR 60 Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants
40 CFR 60 Subpart IIII	New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines
40 CFR 63 Subpart ZZZZ	Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 CFR 63 Subpart AAAAA	Standards for Hazardous Air Pollutants for Lime Manufacturing Plants
40 CFR 63 Subpart CCCCC	Standards for Hazardous Air Pollutants for Gasoline Dispensing Facilities
40 CFR 70	Federally Mandated Operating Permits
40 CFR 82	Protection of Stratospheric Ozone