



PART 70 PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

Operating Permit Number: OP2010-016
Expiration Date: FEB 04 2015
Installation ID: 186-0035
Project Number: 2006-09-083

Installation Name and Address

Chemical Lime Company
20947 White Sands Road
P.O. Box 488
Ste. Genevieve, MO 63670
Ste. Genevieve County

Parent Company's Name and Address

Chemical Lime Company
P.O. Box 985004
Fort Worth TX, 76185

Installation Description:

Chemical Lime Company operates a lime manufacturing plant near Ste. Genevieve. Raw limestone is transported to the site from a nearby quarry (Tower Rock Stone). The limestone is calcined in two solid fuel fired rotary preheater kilns. Product lime is then transported to customers by barge, rail, and truck.

FEB 05 2010

Effective Date

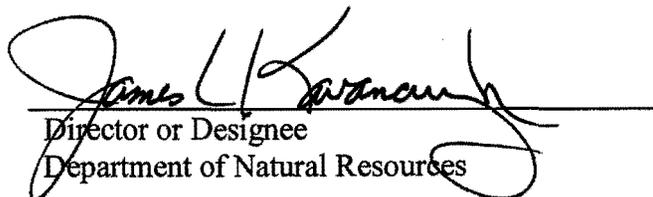

Director or Designee
Department of Natural Resources

Table of Contents

I. INSTALLATION DESCRIPTION AND EQUIPMENT LISTING	4
INSTALLATION DESCRIPTION	4
EMISSION UNITS WITH LIMITATIONS	5
EMISSION UNITS WITHOUT LIMITATIONS	8
DOCUMENTS INCORPORATED BY REFERENCE	8
II. PLANT WIDE EMISSION LIMITATIONS.....	9
Permit Condition PW001	9
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	9
40 CFR Part 63, Subpart AAAAA National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants....	9
– General Compliance Requirements - §63.7100.....	9
Permit Condition PW002	10
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	10
40 CFR Part 63, Subpart AAAAA National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants..	10
– Startup, Shutdown and Malfunction Plan - §63.7100(e)	10
40 CFR Part 63, Subpart A, General Provisions – Startup, Shutdown and Malfunction Plan - §63.6(e)(3)	10
Permit Condition PW003	12
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	12
40 CFR Part 63, Subpart AAAAA National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants..	12
– §63.7140 - General Provisions.....	12
40 CFR Part 63, Subpart A, General Provisions	12
Permit Condition PW004	12
10 CSR 10-6.060 Construction Permits Required.....	12
Construction Permit No. 1294-004	12
III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS	13
EU0130 THROUGH EU0170; AND EU0200 - LIMESTONE TRANSFER POINTS	13
Permit Condition EU0130-001 through EU0170-001; and EU0200-001	13
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	13
40 CFR Part 63, Subpart AAAAA National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants..	13
EU0250 THROUGH EU0260 - DOLIME TRANSFER POINTS	17
Permit Condition EU0250-001 through EU0260-001	17
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes.....	17
EU0270 THROUGH EU0570 - LIME TRANSFER POINTS (DIVERter GATES, BINS, CONVEYORS AND LOADOUTS)17	
Permit Condition EU0270-001 through EU0570-001	19
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes.....	19
EU0590 THROUGH EU0610 - COAL CONVEYING (TRANSFER POINTS)	20
Permit Condition EU0590-001 through EU0610-001	20
10 CSR 10-6.070 New Source Performance Regulations	20
40 CFR Part 60 Subpart Y Standards of Performance for Coal Preparation Plants	20
EU0620 THROUGH EU0630 - DOLIME TRANSFER POINTS	21
Permit Condition EU0620-001 through EU0630-001	21
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes.....	21
EU0640 THROUGH EU0665 - LIME/DOLIME AND COAL TRANSFER POINTS	22
Permit Condition EU0640-001, EU0650-001 and EU0660-001	22
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes.....	22
Permit Condition EU0645-001, EU0655-001 and EU0665-001	23
10 CSR 10-6.070 New Source Performance Regulations	23
40 CFR Part 60 Subpart Y Standards of Performance for Coal Preparation Plants	23
EU0670 THROUGH EU0760 - COAL/COKE TRANSFER POINTS	24
Permit Condition EU0670-001 through EU0760-001	24
10 CSR 10-6.070 New Source Performance Regulations	24
40 CFR Part 60 Subpart Y Standards of Performance for Coal Preparation Plants	24

EU0770 THROUGH 0780 - LIME KILNS.....	26
Permit Condition EU0770-001 through EU0780-001	26
10 CSR 10-6.060 Construction Permits Required.....	26
Construction Permit No. 1294-004	26
Permit Condition EU0770-002 through EU0780-002	28
10 CSR 10-6.070 New Source Performance Regulations	28
40 CFR Part 60, Subpart HH Standards of Performance for Lime Manufacturing Plants	28
Permit Condition EU0770-003 through EU0780-003	30
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	30
40 CFR Part 63, Subpart AAAAA National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants..	30
EU0810 - LIMESTONE SCREEN	37
Permit Condition EU0810-001	37
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	37
40 CFR Part 63, Subpart AAAAA National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants..	37
EU0820 – LIME STORAGE SILO SCREEN	41
Permit Condition EU0820-001	41
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes.....	41
EU0840 – TP41 (REJECT BIN BN411 BIN-LOADOUT).....	41
EU0880 – TP74 (VIN. SCREEN 534A TO BC605).....	41
EU0920 – TP106 (BC632 TO BC421) LIME TRANSFER POINT	41
Permit Condition EU0840-001, EU0880-001 and EU0920-001	41
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes.....	41
EU1000 THROUGH EU1080 - LIME TRANSFER POINTS (CONVEYORS).....	42
Permit Condition EU1000-001 through EU1010-001, EU1030-001 through EU1050-001, and EU1070-001 through EU1080.....	42
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes.....	42
EU1090 – BM1 (BALL MILL BM206).....	43
Permit Condition EU1090-001	43
10 CSR 10-6.070 New Source Performance Regulations	43
40 CFR Part 60 Subpart Y Standards of Performance for Coal Preparation Plants	43
Permit Condition EU1090-002	44
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes.....	44
EU1100 THROUGH EU1110 - EMERGENCY REJECT BIN	44
Permit Condition EU1100-001 through EU1110-001	44
10 CSR 10-6.060 Construction Permits Required.....	44
Construction Permit No. 092001-005	44
IV. CORE PERMIT REQUIREMENTS	45
V. GENERAL PERMIT REQUIREMENTS.....	53
VI. ATTACHMENTS	59
ATTACHMENT A	60
Fugitive Emission Observations	60
ATTACHMENT B	61
Opacity Emission Observations	61
ATTACHMENT C	62
Method 9 Opacity Emissions Observations	62
ATTACHMENT D	63
Construction Permit 092001-005 — Monthly PM ₁₀ Emission Tracking Record.....	63

I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

Chemical Lime Company operates a 2,700 ton per day lime manufacturing plant near Ste. Genevieve. Raw limestone is transported to the site from a nearby quarry (Tower Rock Stone). The limestone is calcined in two solid fuel fired (supplemented with natural gas) rotary preheater kilns. Product lime is then transported to customers by barge, rail, and truck. Fuel in the form of coal and coke arrives at the plant via barge, rail, or truck and is stored in covered bins. The kilns are permitted to operate 24-hours per day, 7 days per week, 52 weeks per year.

The main sources of air pollutants from this installation are the two kilns (Kiln #1 and Kiln #2), the north and south limestone piles, the waste dump pile, the limestone haul road, and the lime haul road. Since the facility triggered Prevention of Significant Deterioration PSD regulations, baghouses have been installed on various sources as best available control technology (BACT) to control PM₁₀. The sources in addition to the kilns that are required to have baghouses installed include the coal and coke material handling points, and several lime handling processes. Truck dumping of raw lime into hoppers is done inside and the emissions from the haul roads are controlled by chemical stabilization and water. Since all of the sources have one form of pollution control implemented, the emissions from these sources are not as significant

The reported actual emissions for the past five years for the installation are listed below:

Reported Air Pollutant Emissions, tons per year								
Year	Particulate Matter ≤ Ten Microns (PM-10)	Particulate Matter ≤ 2.5 Microns (PM-2.5)	Sulfur Oxides (SO _x)	Nitrogen Oxides (NO _x)	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)
2008	137.04	60.42	128.61	1427.69	8.61	28.37	0.01	15.93
2007	137.47	60.73	117.14	1461.05	8.66	28.36	0.02	16.02
2006	144.62	62.64	192.59	1287.35	8.63	28.42	0.01	15.97
2005	143.74	61.94	91.00	1220.00	9.10	29.60	0.00	16.80
2004	141.40	56.17	51.36	1695.85	9.17	27.52	0.00	16.74

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation that emits air pollutants and that are identified as having unit-specific emission limitations.

Emission Unit #	EIQ Reference #	Description of Emission Unit	Make/Model	Construction Date
EU0130	EP13	TP13 (Screen-BC322)	Continental	1995
EU0140	EP15	TP14 (Screen-Chat Bin)	Continental	1995
EU0150	EP16	TP16 (BC322-DG324)	Continental	1995
EU0160	EP17	TP17 (DG324-BC325)	Continental	1995
EU0170	EP18	TP18 (BC325-West Stone Bin)	Continental	1995
EU0200	EP21	TP21 (DG324-East Stone Bin)	Continental	1995
EU0250	EP26	TP26 (Dolime Bin-Loadout)	Continental	1995
EU0260	EP27	TP27 (Dolime Bin-BC530)	Continental	1995
EU0270	EP28	TP28 (Cooler East-DG401)	Continental	1995
EU0280	EP29	TP29 (Cooler West-DG402)	Continental	1995
EU0290	EP30	TP30 (DG402-BC404)	Continental	1995
EU0300	EP31	TP31 (DG402-BC403)	Continental	1995
EU0310	EP32	TP32 (DG401-BC403)	Continental	1995
EU0320	EP33	TP33 (DG401-BC404)	Continental	1995
EU0330	EP34	TP34 (BC403-DG405)	Continental	1995
EU0340	EP35	TP35 (BC404-DG406)	Continental	1995
EU0350	EP36	TP36 (DG405-BC413)	Continental	1995
EU0360	EP37	TP37 (DG406-BC413)	Continental	1995
EU0370	EP38	TP38 (DG405-BC409)	Continental	1995
EU0380	EP39	TP39 (DG406-BC409)	Continental	1995
EU0390	EP40	TP40 (BC409-DG460)	Continental	1995
EU0400	EP122	TP94 (DG460-DG460A)	Continental	1995
EU0410	EP123	TP95 (DG460A-BN411)	Continental	1995
EU0420	EP124	TP96 (BN411-BC508)	Continental	1995
EU0430	EP125	TP97 (DG460A-BN431)	Continental	1995
EU0440	EP126	TP98 (DG460-BC461)	Continental	1995
EU0450	EP92	TP69 (BC461-Lime Screen SN462)	Continental	1995
EU0460	EP96	TP73 (SN462-BC473)	Continental	1995
EU0470	EP127	TP99 (BC463-Lime Storage)	Continental	1995
EU0480	EP128	TP100 (DG485-BC473)	Hi-Roller	2008
EU0490	EP129	TP101 (BC473-Lime Storage)	Hi-Roller	2008
EU0500	EP42	TP42 (BN411-BC530)	Continental	1995
EU0510	EP43	TP43 (BC413-Lime Storage)	Continental	1995
EU0520	EP44	TP44 (BC530 Tunnel Front)	Continental	1995
EU0530	EP45	TP45 (BC530-DG531)	Continental	1995
EU0540	EP46	TP46 (DG531-BC535)	Continental	1995

Emission Unit #	EIQ Reference #	Description of Emission Unit	Make/Model	Construction Date
EU0550	EP47	TP47 (BC535-BC538)	Continental	1995
	EP47a	TP47 (BC535-BC538)		
EU0560	EP48	TP48 (BC538-Loadout)	Continental	1995
EU0570	EP49	TP49 (DG531-BN532)	Continental	1995
EU0590	EP51	TP51 (HO621-BC622)	Continental	1995
EU0600	EP52	TP52 (BC622-BC535)	Continental	1995
EU0610	EP53	TP53 (BC535-BC605)	Continental	1995
EU0620	EP54	TP54 (DG608-SI611)	Continental	1995
EU0630	EP55	TP55 (BC530 Tunnel Back)	Continental	1995
EU0640	EP58	TP56 (Rail Hopper HO601-BF603)	Continental	1995
EU0645	EP56/57	TP56 (Rail Hopper HO601-BF603)	Continental	1995
EU0650	EP61	TP57 (BF603-BC605)	Continental	1995
EU0655	EP59/60	TP57 (BF603-BC605)	Continental	1995
EU0660	EP64	TP58 (BC605-DG608)	Continental	1995
EU0665	EP62/63	TP58 (BC605-DG608)	Continental	1995
EU0670	EP65/66	TP59 (DG608-BC612)	Continental	1995
EU0680	EP67/68	TP60 (BC612-DG613)	Continental	1995
EU0690	EP69	TP61 (DG613-SI201-1)	Continental	1995
EU0700	EP70	TP62 (DG613-BC614)	Continental	1995
EU0710	EP71	TP63 (BC614-SI201-2)	Continental	1995
EU0720	EP72	TP64 (SI201-1-BF203-1)	Continental	1995
EU0730	EP73	TP65 (SI201-2-BF203-2)	Continental	1995
EU0740	EP131	TP103 (BF203-1 -BC204)	Continental	1995
EU0750	EP132	TP104 (BF203-2 -BC204)	Continental	1995
EU0760	EP74/75	TP66 (BC204-Ball Mill)	Continental	1995
EU0770	EP76	K1 (Kiln#1)	KVS	1995
EU0780	EP77, 78	K2 (Kiln#2)	KVS	1995
EU0810	EP87	CLC41 (SN317)	Tabor	1995
EU0820	EP88	CLC47 (Lime Storage Silo Screen SN462)	Tabor	1995
EU0840	EP41	TP41 (Reject BN411 Bin-Loadout)	Continental	1995
EU0880	EP97	TP74 (Vin. Screen 534A to BC605)	Continental	1995
EU0910	EP139	TP105 (BC631 to BC632)	Hi-Roller	2001
EU0920	EP140	TP106 (BC632 to BN421)	Hi-Roller	2001
EU0990	EP220	TP118 (SN462 - Ground)	Tabor	1995
EU1000	EP221	TP119 (SN462 - DG465)	Continental	1995
EU1010	EP222	TP120 (DG470A - SN462)	Continental	1995
EU1030	EP224	TP122 (DG465 - BC473)	Continental	1995
EU1040	EP225	TP123 (SN462 - DG467)	Continental	1995
EU1050	EP226	TP124 (DG467 - BC463)	Continental	1995

Emission Unit #	EIQ Reference #	Description of Emission Unit	Make/Model	Construction Date
EU1070	EP228	TP126 (SN462 – SC477)	Hi-Roller	2008
EU1080	EP229	TP127 (SC477 – Lime Storage)	Hi-Roller	2008
EU1090	EP230	BM1 (Ball Mill BM206)	KVS	1995
EU1100	EP91	TP68 Kiln Dust Bin - Truck		
EU1110	EP93	TP70: Temp/Calibration Belt-Truck		

EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

Emission Unit #	EIQ Reference #	Description of Emission Unit
	EP50	TP50 - (Loadout BN532 Bin-Loadout)
	EP81	S1 – North Limestone Storage Pile
	EP82	S2 – South Limestone Storage Pile
	EP84	S4 – Waste Dump Pile
	EP85	R1 - (Limestone Haul Road (In))
	EP86	R2 - (Lime Haul Road (Out))
EU0010	EP01	TP1 (Truck-Hopper) - Transfer of limestone from truck to 100 ton hopper
EU0020	EP02	TP2 (Hopper-Belt Feeder 303) - Transfer from 100 ton hopper to belt feeder 303
EU0030	EP03	TP3 (Belt feeder 303 – BC305) - Transfer from 30” belt conveyor to 36” belt conveyor
EU0040	EP04	TP4 (BC305 – DG306) - Transfer of limestone from 36” belt conveyor to diverter gate
EU0050	EP05	TP5 (DG306 – BC307) - Transfer of limestone from diverter gate to 36” belt conveyor (BC-307)
EU0060	EP06	TP6 (DG306 – BC308) - Transfer of Limestone from diverter gate to 36” Belt Conveyor (BC-308)
EU0070	EP07	TP7 (BC307 to S. Pile) - Transfer of limestone from conveyor to storage pile
EU0080	EP08	TP8 (BC308 to N. Pile) - Transfer of limestone from conveyor to storage pile
EU0090	EP09	TP9 (BC315 Tunnel Front) - Front end of belt conveyor BC315
EU0100	EP10	TP10 (BC315 Tunnel Back) - Back end of belt Conveyor BC315
EU0110	EP11	TP11 (BC315-DG316) - Transfer of limestone from conveyor to diverter gate
EU0120	EP12	TP12 (DG316-Screen) - Transfer of limestone from diverter gate to screen
EU0580	EP130	TP102 (SC534D – BC605) – Lime transfer from screw conveyor to belt conveyor
EU0830	EP90	TP67 (T.R. Hopper-BC305) - Transfer of limestone from T.R. hopper to belt conveyor
EU0890	EP133	TP107 (Loader to Hopper) - Lime transfer from loader to hopper
EU0900	EP134	TP108(Hopper to BC605) - Lime transfer from hopper to belt conveyor – EU0900
EU0930	EP142	TP109 (BC21 to BC22) - Transfer of limestone from belt conveyor to belt conveyor
EU0940	EP143	TP110 (BC22 to BC23) - Transfer of limestone from belt conveyor to belt conveyor
EU0950	EP144	TP111 (BC23 to Storage Pile 1) - Transfer of limestone from belt conveyor to storage pile
EU0960	EP145	TP112 (BC23 to Storage Pile 2) - Transfer of limestone from belt conveyor to storage pile
EU0970	EP146	TP113 (BC23 to Storage Pile 3) - Transfer of limestone from belt conveyor to storage pile
EU0980	EP150	TP117 (Storage Pile to BC385) - Transfer of limestone from storage pile to belt conveyor
EU1020	EP223	TP121 (DG465 – BE470) - Transfer of lime from diverter gate to bucket elevator – EU1020
EU1060	EP227	TP125 (DG467 – BE470) - Transfer of lime from diverter gate to bucket elevator – EU1060

DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.

- 1) Construction Permit Number 1294-004, Issued December 7, 1994, and
- 2) Construction Permit Number 092001-005, Issued August 21, 2001.

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

Permit Condition PW001

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart AAAAA

National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants

– General Compliance Requirements - §63.7100

General Compliance Requirements:

- 1) After your initial compliance date, you must be in compliance with the emission limitations (including operating limits) in this subpart at all times, except during periods of startup, shutdown, and malfunction. [§63.7100(a)]
- 2) You must be in compliance with the opacity and visible emission (VE) limits in this subpart during the times specified in §63.6(h)(1). [§63.7100(b)]
- 3) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i). [§63.7100(c)]
- 4) You must prepare and implement for each LMP, a written operations, maintenance, and monitoring (OM&M) plan. You must submit the plan to the applicable permitting authority for review and approval as part of the application for a 40 CFR Part 70 or 40 CFR Part 71 permit. Any subsequent changes to the plan must be submitted to the applicable permitting authority for review and approval. Pending approval by the applicable permitting authority of an initial or amended plan, you must comply with the provisions of the submitted plan. Each plan must contain the following information: [§63.7100(d)]
 - 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. [§63.7100(d)(1)]
 - b) A monitoring schedule for each emission unit. [§63.7100(d)(2)]
 - c) Procedures for the proper operation and maintenance of each emission unit and each air pollution control device used to meet the applicable emission limitations and operating limits in Tables 1 and 2 to this subpart, respectively. [§63.7100(d)(3)]
 - d) Procedures for the proper installation, operation, and maintenance of monitoring devices or systems used to determine compliance, including: [§63.7100(d)(4)]
 - i) Calibration and certification of accuracy of each monitoring device; [§63.7100(d)(4)(i)]
 - ii) Performance and equipment specifications for the sample interface, parametric signal analyzer, and the data collection and reduction systems; [§63.7100(d)(4)(ii)]
 - iii) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), and (4)(ii); and [§63.7100(d)(4)(iii)]
 - iv) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d). [§63.7100(d)(4)(iv)]
 - e) Procedures for monitoring process and control device parameters. [§63.7100(d)(5)]

- f) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the operating limits specified in Table 2 to this subpart, including:
[§63.7100(d)(6)]
 - i) Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and [§63.7100(d)(6)(i)]
 - ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time and date the corrective action was completed. [§63.7100(d)(6)(ii)]
 - g) A maintenance schedule for each emission unit and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
[§63.7100(d)(7)]
- 5) You must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in §63.6(e)(3). [§63.7100(e)]

Permit Condition PW002

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart AAAAA

National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants

– Startup, Shutdown and Malfunction Plan - §63.7100(e)

40 CFR Part 63, Subpart A, General Provisions – Startup, Shutdown and Malfunction Plan -
§63.6(e)(3)

Emission Limitation:

- 1) The owner or operator of an affected source shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standard. As required under §63.8(c)(1)(i), the plan shall identify all routine or otherwise predictable continuous monitoring systems (CMS) malfunctions. This plan shall be developed by the owner or operator by the source's compliance date for that relevant standard. The plan shall be incorporated by reference into the source's title V permit. The purpose of the startup, shutdown, and malfunction plan is to: [§63.6(e)(3)(i)]
 - a) Ensure that, at all times, owners or operators operate and maintain affected sources including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards;
[§63.6(e)(3)(i)(A)]
 - b) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and
[§63.6(e)(3)(i)(B)]
 - c) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation). [§63.6(e)(3)(i)(C)]
- 2) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e). [§63.7121(d)]

Monitoring:

- 1) At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards. [§63.6(e)(1)(i)]
- 2) Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan required in §63.6(e)(3) of this section. [§63.6(e)(1)(ii)]

Recordkeeping:

- 1) The owner or operator shall keep the written startup, shutdown, and malfunction plan on-record after it is developed to be made available for inspection, upon request, by the administrator for the life of the affected source or until the affected source is no longer subject to the provisions of 40 CFR, Part 63. If the startup, shutdown, and malfunction plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the startup, shutdown, and malfunction plan on record, upon request by the administrator, for the period of 5 years after each revision to the plan. [§63.6(e)(3)(v)]
- 2) When actions taken by the owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the start-up, shutdown and malfunction plan, the owner or operator shall keep records for that event that demonstrate the procedures specified in the plan were followed. These records may take the form of a “checklist,” or other effective form of recordkeeping, that confirms conformance with the startup, shutdown, and malfunction plan for that event. In addition the owner or operator shall keep records of these events as specified in §63.10(b) (and elsewhere in this Part), including records of the occurrence and duration of each startup, shutdown, or malfunction operation and each malfunction of the air pollution control equipment. [§63.6(e)(3)(iii)]
- 3) If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the startup, shutdown, and malfunction plan, the owner or operator shall record the actions taken for that event. [§63.6(e)(3)(iv)]

Reporting:

- 1) If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in §63.10(d)(5)(i). The compliance report must be submitted semiannually according to the requirements in §63.7131(b). [§63.7131(c)(4) and Item 1.e. of Table 7 to Subpart AAAAA of Part 63]
- 2) You must submit an immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your SSMP. The report must contain actions taken for the event and you must submit the report by fax or telephone within 2 working days after starting actions inconsistent with the SSMP. [Item 2 of Table 7 to Subpart AAAAA of Part 63]
- 3) You must submit an immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your SSMP. The report must contain information in §63.10(d)(5)(ii) and must be submitted by letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority. See §63.10(d)(5)(ii). [Item 3 of Table 7 to Subpart AAAAA of Part 63]

Permit Condition PW003

10 CSR 10-6.075
Maximum Achievable Control Technology Regulations
40 CFR Part 63, Subpart AAAAA
National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants
– §63.7140 - General Provisions
40 CFR Part 63, Subpart A, General Provisions

Table 8 to 40 CFR Part 63, Subpart AAAAA shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. When there is overlap between Subpart A and subpart AAAAA, as indicated in the “Explanations” column in Table 8, subpart AAAAA takes precedence.

Permit Condition PW004

10 CSR 10-6.060 Construction Permits Required
Construction Permit No. 1294-004

Operational Limitation/Equipment Specifications:

- 1) All fuel storage bins shall either be located underground, enclosed within a building, or controlled by a baghouse. [Construction Permit 1294-004, Special Condition 9]
- 2) All lime transfer points and conveyors shall either be located underground, enclosed within a building, or controlled by a baghouse. [Construction Permit 1294-004, Special Condition 10]
- 3) No fuels other than that stated in the construction permit application and natural gas shall be combusted in the kilns at any time. [Construction Permit 1294-004, Special Condition 11]
- 4) Emissions of particulate matter (PM) from the lime unloading points, lime transfer points and conveyors, and lime screening shall be controlled by fabric filter baghouses. [Construction Permit 1294-004, Special Condition 13]
- 5) Emission of fugitive PM from haul roads shall be controlled by the application of suitable chemical dust suppressants and / or water. [Construction Permit 1294-004, Special Condition 14]

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

EU0130 through EU0170; and EU0200 - Limestone Transfer Points		
Emission Unit	Description	2008 EIQ Reference #
EU0130	TP13 (Screen – BC322) - Transfer of limestone from screen to conveyor. PM control device – Fabric filter (DC-321)	EP13
EU0140	TP14 (Screen - Chat Bin) - Transfer of limestone from screen to chat bin PM control device – Fabric filter (DC-321)	EP15
EU0150	TP16 (BC322 – DG324) - Transfer of limestone from conveyor to diverter gate. PM control device – Fabric filter (DC-323)	EP16
EU0160	TP17 (BC324 – DG325) - Transfer of limestone from diverter gate to conveyor. PM control device – Fabric filter (DC-323)	EP17
EU0170	TP18 (BC325 – West Stone Bin) - Transfer of limestone from conveyor to west stone bin. PM control device – Fabric filter (DC-110-2)	EP18
EU0200	TP21 (DG324 – East Stone Bin) - Transfer of limestone from diverter gate to east stone bin. PM control device – Fabric filter (DC-110-1)	EP21

<p>Permit Condition EU0130-001 through EU0170-001; and EU0200-001</p> <p>10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart AAAAA National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants</p>

Emission Limitation:

- 1) PM stack emissions from all PSH operations at a new or existing affected source shall not exceed 0.05 grams per dry standard cubic meter (d/dscm).
 [§63.7090(a) and Item 5 of Table 1 to 40 CFR Part 63, Subpart AAAAA]
- 2) Stack emissions from all PSH operations at a new or existing affected source, unless the stack emissions are discharged through a wet scrubber control device, must not exceed 7 percent opacity.
 [§63.7090(a) and Item 6 of Table 1 to 40 CFR Part 63, Subpart AAAAA]

Operational Limitation

- 1) As required in §63.7090(b), you must prepare a written OM&M plan; the plan must include the items listed in §63.7100(d) (see Permit Condition PW001) and the corrective actions to be taken when required in Table 5 to 40 CFR Part 63, Subpart AAAAA.
 [§63.7090(b) and Item 5 of Table 2 to 40 CFR Part 63, Subpart AAAAA]

- 2) As required in §63.7090(b). for each emission unit equipped with an add-on control device: [§63.7090(b) and Item 5 of Table 2 to 40 CFR Part 63, Subpart AAAAA]
 - a) You must vent captured emissions through closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to the fabric filter (FF); and
 - b) Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

Performance Testing:

- 1) You must conduct a performance test within 5 years following the initial performance test and within 5 years following each subsequent performance test thereafter. [§63.7111]
- 2) As required in §63.7112, for each stack emission from a PSH operation, you must measure PM emissions using Method 5 or Method 17 in Appendix A to 40 CFR Part 60 according to the following requirement: [Item 12 of Table 4 to 40 CFR Part 63, Subpart AAAAA]
 - a) The sample volume must be at least 1.70 dscm (60 dscf); for Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters; and if the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter (Method 17 may be used only with exhaust gas temperatures of not more than 250 °F).
- 3) As required in §63.7112, for each stack emission from a PSH operation, conduct opacity observations using Method 9 in Appendix A to 40 CFR Part 60 according to the following requirement. [Item 13 of Table 4 to 40 CFR Part 63, Subpart AAAAA]
 - a) The test duration must be for at least 3 hours and you must obtain at least thirty, 6-minute averages.
- 4) Each performance test must be conducted according to the requirements in 40 CFR §63.7(e)(1) and under the specific conditions specified in Table 4 to 40 CFR Part 63, Subpart AAAAA. [§63.7112(b)]
- 5) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR §63.7(e)(1). [§63.7112(c)]
- 6) Except for opacity and VE observations, you must conduct three separate test runs for each performance test required in this section, as specified in 40 CFR §63.7(e)(3). Each test run must last at least 1 hour. [§63.7112(d)]
- 7) Performance test results must be documented in complete test reports that contain the information required by §63.7112(h)(1) through (10), as well as all other relevant information. The plan to be followed during testing must be made available to the Administrator at least 60 days prior to testing. [§63.7112(h)]
 - a) A brief description of the process and the air pollution control system; [§63.7112(h)(1)]
 - b) Sampling location description(s); [§63.7112(h)(2)]
 - c) A description of sampling and analytical procedures and any modifications to standard procedures; [§63.7112(h)(3)]
 - d) Test results, including opacity; [§63.7112(h)(4)]
 - e) Quality assurance procedures and results; [§63.7112(h)(5)]
 - f) Records of operating conditions during the test, preparation of standards, and calibration procedures; [§63.7112(h)(6)]
 - g) Raw data sheets for field sampling and field and laboratory analyses; [§63.7112(h)(7)]
 - h) Documentation of calculations; [§63.7112(h)(8)]
 - i) All data recorded and used to establish operating limits; and [§63.7112(h)(9)]

- j) Any other information required by the test method. [§63.7112(h)(10)]

Monitoring:

For each PSH operation subject to an opacity limit as specified in Table 1 to 40 CFR Part 63, Subpart AAAAA, and any vents from buildings subject to an opacity limit, you must conduct a visible emissions (VE) check according to item 1 in Table 6 to 40 CFR Part 63, Subpart AAAAA and as follows:

[§63.7121(e)]

- 1) Conduct visual inspections that consist of a visual survey of each stack or process emission point over the test period to identify if there are VE, other than condensed water vapor. [§63.7121(e)(1)]
- 2) Select a position at least 15 but not more 1,320 feet from the affected emission point with the sun or other light source generally at your back. [§63.7121(e)(2)]
- 3) The observer conducting the VE checks need not be certified to conduct EPA Method 9 in Appendix A to 40 CFR Part 60, but must meet the training requirements as described in EPA Method 22 of Appendix A to Part 60. [§63.7121(e)(3)]
- 4) For each PSH operation subject to 10 percent opacity limitation as required in Table 1 to 40 CFR Part 63, Subpart AAAAA, you must demonstrate on going compliance:
[Item 1 of Table 6 to 40 CFR Part 63, Subpart AAAAA]
 - a) Conducting a monthly 1-minute VE check of each emission unit in accordance with §63.7121(e); the check must be conducted while the affected source is in operation;
 - b) If no VE are observed in 6 consecutive monthly checks for any emission unit, you may decrease the frequency of VE checking from monthly to semi-annually for that emission unit; if VE are observed during any semiannual check, you must resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks;
 - c) If no VE are observed during the semiannual check for any emission unit, you may decrease the frequency of VE checking from semi-annually to annually for that emission unit; if VE are observed during any annual check, you must resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks; and
 - d) VE are observed during any VE check, you must conduct a 6-minute test of opacity in accordance with Method 9 of appendix A to part 60 of this chapter; you must begin the Method 9 test within 1 hour of any observation of VE and the 6-minute opacity reading must not exceed the applicable opacity limit.

Reporting:

- 1) Notification - §63.7130
 - a) You must submit all of the notifications in §§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 to you, by the dates specified. [§63.7130(a)]
 - b) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, as required in §63.7(b)(1). [§63.7130(d)]
 - c) If you are required to conduct a performance test, design evaluation, opacity observation, VE observation, or other initial compliance demonstration as specified in Table 3 or 4 to 40 CFR Part 63, Subpart AAAAA, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). [§63.7130(e)]
- 2) Reports - §63.7131
 - a) You must submit compliance report semiannually according to the requirements in §63.7131(b). If there are no deviations from opacity limit, the report must contain a statement that there were

- no deviations from the emission limitations during the reporting period. [§63.7131(a) and Item 1 of Table 7 to 40 CFR Part 63, Subpart AAAAA]
- b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date specified in Table 7 to this subpart and according to the requirements in §63.7131(b)(1) through (5). [§63.7131(b)]
 - i) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7083 and ending on June 30 or December 31, whichever date is the first date following the end of the first half calendar year after the compliance date that is specified for your source in §63.7083. [§63.7131(b)(1)]
 - ii) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first half calendar year after the compliance date that is specified for your affected source in §63.7083. [§63.7131(b)(2)]
 - iii) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. [§63.7131(b)(3)]
 - iv) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. [§63.7131(b)(4)]
 - v) For each affected source that is subject to permitting regulations pursuant to part 70 or part 71 of this chapter, if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates specified in §63.7131(b)(1) through (4). [§63.7131(b)(5)]
 - c) The compliance report must contain the information specified in §63.7131(c)(1) through (5). [§63.7131(c)]
 - i) Company name and address. [§63.7131(c)(1)]
 - ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [§63.7131(c)(2)]
 - iii) Date of report and beginning and ending dates of the reporting period. [§63.7131(c)(3)]
 - iv) If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in §63.10(d)(5)(i). [§63.7131(c)(4)]
 - v) If there were no deviations from emission limitations (opacity limit) that apply to you, the compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. [§63.7131(c)(5)]
 - d) For each deviation from an emission limitation (opacity limit) that occurs at an affected source where you are not using a CMS to comply with the emission limitations in this subpart, the compliance report must contain the information specified in §63.7131(c)(1) through (4) and §63.7131(d)(1) and (2). The deviations must be reported in accordance with the requirements in §63.10(d). [§63.7131(d)]
 - i) The total operating time of each emission unit during the reporting period. [§63.7131(d)(1)]
 - ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [§63.7131(d)(2)]
 - e) Each facility that has obtained a title V operating permit pursuant to 40 CFR Part 70 or 40 CFR Part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance

report specified in Table 7 to 40 CFR Part 63 Subpart AAAAA along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation you may have to report deviations from permit requirements to the permit authority. [§63.7131(f)]

EU0250 through EU0260 - Dolime Transfer Points		
Emission Unit	Description	2008 EIQ Reference #
EU0250	TP26 (Dolime Bin-Loadout) – Dolime transfer from dolime bin BN421 to truck. PM control device – Fabric filter (DC-512)	EP26
EU0260	TP27 (Dolime Bin – BC530) – Dolime transfer from BN421 bin to Belt Conveyor. PM control device – Fabric filter (DC-512)	EP27

Permit Condition EU0250-001 through EU0260-001
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

- 1) The permittee shall not emit particulate matter in excess of 68.96 lbs/hr from EU0250 through EU0260.
- 2) No person shall cause, allow or permit the emission of particulate matter from any source in a concentration in excess of 0.30 grain per standard cubic foot of exhaust gases.

Note: The emission rates in this permit condition apply to the sources individually and not the aggregated sources.

Monitoring/Recordkeeping/Reporting:

Not required (See Statement of Basis).

EU0270 through EU0570 - Lime Transfer Points (Diverter Gates, Bins, Conveyors and Loadouts)		
Emission Unit	Description	2008 EIQ Reference #
EU0270	TP28 (Cooler East – DG401) - Transfer of lime from cooler east to diverter gate. PM control device – Fabric filter (DC-407)	EP28
EU0280	TP29 (Cooler West – DG402) - Transfer of lime from cooler west to diverter gate. PM control device – Fabric filter (DC-407)	EP29

EU0290	TP30 (DG402 – BC404) - Transfer of lime from diverter gate to belt conveyor. PM control device – Fabric filter (DC-407)	EP30
EU0300	TP31 (DG402 – BC403) - Transfer of lime from diverter gate to belt conveyor. PM control device – Fabric filter (DC-407)	EP31
EU0310	TP32 (DG401 – BC403) - Transfer of lime from diverter gate to belt conveyor. PM control device – Fabric filter (DC-407)	EP32
EU0320	TP33 (DG401 – BC404) - Transfer of lime from diverter gate to belt conveyor. PM control device – Fabric filter (DC-407)	EP33
EU0330	TP34 (BC403 – DG405) – Transfer of lime from belt conveyor to diverter gate. PM control device – Fabric filter (DC-422)	EP34
EU0340	TP35 (BC404 – DG406) – Transfer of lime from belt conveyor to diverter gate. PM control device – Fabric filter (DC-422)	EP35
EU0350	TP36 (BC405 – BC413) – Transfer of lime from diverter gate to belt conveyor. PM control device – Fabric filter (DC-422)	EP36
EU0360	TP37 (DG406 – BC413) – Transfer of lime from diverter gate to belt conveyor. PM control device – Fabric filter (DC-422)	EP37
EU0370	TP38 (DG405 – BC409) – Transfer of lime from diverter gate to belt conveyor. PM control device – Fabric filter (DC-422)	EP38
EU0380	TP39 (DG406 – BC409) – Transfer of lime from diverter gate to belt conveyor. PM control device – Fabric filter (DC-422)	EP39
EU0390	TP40 (BC409 – DG460) – Transfer of lime from belt conveyor to diverter gate. PM control device – Fabric filter (DC-450)	EP40
EU0400	TP94 (DG406 – DG460A) – Transfer of lime from diverter gate to diverter gate. PM control device – Fabric filter (DC-450)	EP122
EU0410	TP95 (DG460A – BN411) – Transfer of lime from diverter gate to bin. PM control device – Fabric filter (DC-420)	EP123
EU0420	TP96 (BN411 – SC508) – Transfer of lime from bin to screw conveyor. PM control device – Fabric filter (DC-512)	EP124
EU0430	TP97 (DG460A – BN431) – Transfer of lime from diverter gate to bin. PM control device – Fabric filter (DC-420)	EP125
EU0440	TP98 (DG460 – BC461) – Transfer of lime from diverter gate to belt conveyor. PM control device – Fabric filter (DC-450)	EP126
EU0450	TP69 (BC461 – Lime Screen SN462) – Transfer of lime from belt conveyor to lime screen. PM control device – Fabric filter (DC-466)	EP92
EU0460	TP73 (SN462 – BC463 & BC473) – Transfer of lime from lime screen to belt conveyor. PM control device – Fabric filter (DC-466)	EP96
EU0470	TP99 (BC463 – Lime Storage) – Transfer of lime from belt conveyor to lime storage. PM control device – Fabric filter (DC-419)	EP127
EU0480	TP100 (DG485 – BC473) – Transfer of lime from diverter gate to belt conveyor. PM control device – Fabric filter (DC-466)	EP128
EU0490	TP101 (BC473 – Lime Storage) – Transfer of lime from belt conveyor to lime storage. PM control device – Fabric filter (DC-419)	EP129
EU0500	TP42 (BN411 – BC530) – Transfer of lime from bin BN411 to belt conveyor. PM control device – Fabric filter (DC-512)	EP42

EU0510	TP43 (BNBC413 – Lime Storage) – Transfer of lime from belt conveyor to lime storage. PM control device – Fabric filter (DC-419)	EP43
EU0520	TP44 (BC530 Tunnel Front) – Front end of lime belt conveyor BC530. PM control device – Fabric filter (DC-512)	EP44
EU0530	TP45 (BC530 – DG531) – Transfer of lime from belt conveyor to diverter gate. PM control device – Fabric filter (DC-536)	EP45
EU0540	TP46 (DG531 – BC535) – Transfer of lime from diverter gate to belt conveyor. PM control device – Fabric filter (DC-536)	EP46
EU0550	TP47 (BC535 – BC538) – Transfer of lime from belt conveyor to belt conveyor. PM control device – Fabric filter (DC-537/537C)	EP47/47a
EU0560	TP48 (BC538 – Loadout) – Transfer of lime from belt conveyor to loadout. PM control device – Fabric filter (DC-542)	EP48
EU0570	TP49 (DG531 – BN532) – Transfer of lime from diverter gate to bin. PM control device – Fabric filter (DC-537/537C)	EP49

Permit Condition EU0270-001 through EU0570-001

10 CSR 10-6.400

Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

- 1) The permittee shall not emit particulate matter in excess of:
 - a) 66.31 lbs/hr from EU0270 through EU0280;
 - b) 58.57 lbs/hr from EU0290 through EU0520; and
 - c) 74.74 lbs/hr from EU0530 through EU0570;
- 2) No person shall cause, allow or permit the emission of particulate matter from any source in a concentration in excess of 0.30 grain per standard cubic foot of exhaust gases.

Note: The emission rates in this permit condition apply to the sources individually and not the aggregated sources.

Monitoring/Recordkeeping/Reporting:

Not required (See Statement of Basis).

EU0590 through EU0610 - Coal Conveying (Transfer Points)		
Emission Unit	Description	2008 EIQ Reference #
EU0590	TP51 (HO621 – BC622) - Coal/Coke transfer from hopper to belt conveyor.	EP51
EU0600	TP52 (BC622 – BC535) - Coal/Coke transfer from belt conveyor to belt conveyor.	EP52
EU0610	TP53 (BC535 – BC605) - Coal/Coke transfer from belt conveyor to belt conveyor.	EP53

Permit Condition EU0590-001 through EU0610-001

10 CSR 10-6.070
 New Source Performance Regulations
 40 CFR Part 60 Subpart Y
 Standards of Performance for Coal Preparation Plants

Emission Limitation:

An owner or operator subject to the provisions of 40 CFR Part 60 Subpart Y shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit twenty percent (20%) opacity or greater. [§60.252(c)]

Monitoring:

- 1) The permittee shall conduct opacity readings on the emission unit(s) using the procedures contained in U.S. EPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit(s) is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
 - a) Monthly observations shall be conducted for a minimum of eight consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
 - b) Observations must be made once every two (2) months for a period of eight months. If a violation is noted, monitoring reverts to monthly. Should no violation of this regulation be observed during this period then-
 - c) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.
- 3) If the source reverts to monthly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

Record Keeping:

- 1) The permittee shall maintain records of all observation results (see Attachment B), noting:
 - a) Whether any air emissions (except for water vapor) were visible from the emission units,
 - b) All emission units from which visible emissions occurred, and

- c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions.
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment C)

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

EU0620 through EU0630 - Dolime Transfer Points		
Emission Unit	Description	2008 EIQ Reference #
EU0620	TP54 (DG608 – SI611) – Dolime transfer from diverter gate to silo. PM control device – Fabric filter (DC-610)	EP54
EU0630	TP55 (BC530 Tunnel Back) – Back end of Belt Conveyor BC530. PM control device – Fabric filter (DC-512)	EP55

Permit Condition EU0620-001 through EU0630-001
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

- 1) The permittee shall not emit particulate matter in excess of:
 - a) 66.31 lbs/hr from EU0620; and
 - b) 74.74 lbs/hr from EU0630.
- 2) No person shall cause, allow or permit the emission of particulate matter from any source in a concentration in excess of 0.30 grain per standard cubic foot of exhaust gases.

Note: The emission rates in this permit condition apply to the sources individually and not the aggregated sources.

Monitoring/Recordkeeping/Reporting:

Not required (See Statement of Basis).

EU0640 through EU0665 - Lime/Dolime and Coal Transfer Points		
Emission Unit	Description	2008 EIQ Reference #
EU0640	TP56 (Rail Hopper HO601 - BF603) – Transfer of lime/dolime from hopper to belt feeder. PM control device – Fabric filter (DC-607)	EP56/57/58
EU0645	TP56 (Rail Hopper HO601 - BF603) – Transfer of coal from hopper to belt feeder. PM control device – None	
EU0650	TP57 (BF603 – BC605) – Transfer of lime/dolime from belt feeder to belt conveyor. PM control device – Fabric filter (DC-607)	EP59/60/61
EU0655	TP57 (BF603 – BC605) – Transfer of coal from belt feeder to belt conveyor. PM control device – None	
EU0660	TP58 (BC605 – DG608) – Transfer of lime/dolime from belt conveyor to diverter gate. PM control device – Fabric filter (DC-609)	EP62/63/64
EU0665	TP58 (BC605 – DG608) – Transfer of coal from belt conveyor to diverter gate. PM control device – None	

<p>Permit Condition EU0640-001, EU0650-001 and EU0660-001</p> <p>10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes</p>
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Emission Limitation:

- 1) The permittee shall not emit particulate matter in excess of:
 - a) 74.74 lbs/hr from EU0640; and
 - b) 58.51 lbs/hr from EU0650, and
 - c) 66.31 lbs/hr from EU0660.
- 2) No person shall cause, allow or permit the emission of particulate matter from any source in a concentration in excess of 0.30 grain per standard cubic foot of exhaust gases.

Note: The emission rates in this permit condition apply to the sources individually and not the aggregated sources.

Monitoring/Recordkeeping/Reporting:

Not required (See Statement of Basis).

Permit Condition EU0645-001, EU0655-001 and EU0665-001

10 CSR 10-6.070
New Source Performance Regulations
40 CFR Part 60 Subpart Y
Standards of Performance for Coal Preparation Plants

Emission Limitation:

An owner or operator subject to the provisions of 40 CFR Part 60 Subpart Y shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit twenty percent (20%) opacity or greater. [§60.252(c)]

Monitoring:

- 1) The permittee shall conduct opacity readings on the emission unit(s) using the procedures contained in U.S. EPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit(s) is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
 - a) Monthly observations shall be conducted for a minimum of eight consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
 - b) Observations must be made once every two (2) months for a period of eight months. If a violation is noted, monitoring reverts to monthly. Should no violation of this regulation be observed during this period then-
 - c) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.
- 4) If the source reverts to monthly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

Record Keeping:

- 1) The permittee shall maintain records of all observation results (see Attachment B), noting:
 - a) Whether any air emissions (except for water vapor) were visible from the emission units,
 - b) All emission units from which visible emissions occurred, and
 - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions.
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment C)

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.

- 2) Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

EU0670 through EU0760 - Coal/Coke Transfer Points		
Emission Unit	Description	2008 EIQ Reference #
EU0670	TP59 (DG608-BC612) – Transfer of coal from diverter gate to belt conveyor. PM control device – None	EP65/66
EU0680	TP60 (BC612 – DG613) – Transfer of coal from belt conveyor to diverter gate. PM control device – Fabric filter (DC-615)	EP67/68
EU0690	TP61 (DG613 – SI201-1) – Transfer of coal from diverter gate to north fuel silo. PM control device – Fabric filter (DC-615)	EP69
EU0700	TP62 (DG613 – BC614) – Transfer of coal from diverter gate to belt conveyor. PM control device – Fabric filter (DC-615)	EP70
EU0710	TP63 (BC614 – SI201-2) – Transfer of coal from belt conveyor to south fuel silo. PM control device – Fabric filter (DC-615)	EP71
EU0720	TP64 (SI201-1 – BF203-1) – Transfer of coal from silo SI201-1 to belt feeder. PM control device – None	EP72
EU0730	TP65 (SI201-2 – BF203-2) – Transfer of coal from silo SI201-2 to belt feeder. PM control device – None	EP73
EU0740	TP103 (BF203-1 – BC204) – Transfer of coal from belt feeder to belt conveyor PM control device – None	EP131
EU0750	TP104 (BF203-2 – BC204) – Transfer of coal from belt feeder to belt conveyor PM control device – None	EP132
EU760	TP66 (BF203-2 – BC204) – Transfer of coal/coke from belt conveyor to mill. PM control device – None	EP74/75

Permit Condition EU0670-001 through EU0760-001

10 CSR 10-6.070
 New Source Performance Regulations
 40 CFR Part 60 Subpart Y
 Standards of Performance for Coal Preparation Plants

Emission Limitation:

An owner or operator subject to the provisions of 40 CFR Part 60 Subpart Y shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit twenty percent (20%) opacity or greater. [§60.252(c)]

Monitoring:

- 1) The permittee shall conduct opacity readings on the emission unit(s) using the procedures contained in U.S. EPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are

only required when the emission unit(s) is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.

- 2) The following monitoring schedule must be maintained:
 - a) Monthly observations shall be conducted for a minimum of eight consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
 - b) Observations must be made once every two (2) months for a period of eight months. If a violation is noted, monitoring reverts to monthly. Should no violation of this regulation be observed during this period then-
 - c) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.
- 3) If the source reverts to monthly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

Record Keeping:

- 1) The permittee shall maintain records of all observation results (see Attachment B), noting:
 - a) Whether any air emissions (except for water vapor) were visible from the emission units,
 - b) All emission units from which visible emissions occurred, and
 - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions.
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment C)

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

EU0770 through 0780 - Lime Kilns		
Emission Unit	Description	2008 EIQ Reference #
EU0770	K1 (Kiln #1) -.Kiln 1 and Associated Lime Cooler PM control device – Fabric filter (DC-110-1)	EP76
EU0780	K1 (Kiln #2) -.Kiln 2 and Associated Lime Cooler PM control device – Fabric filter (DC-110-1)	EP77

Permit Condition EU0770-001 through EU0780-001

10 CSR 10-6.060 Construction Permits Required
 Construction Permit No. 1294-004

Emission Limitation:

- 1) Best Available Control Technology (BACT) for the emissions of nitrogen oxides from the operation of each of these kilns is set at 1.0 pounds per ton of feed material excluding fuel. This shall be achieved by using proper kiln design, proper operation, and low excess air. [Construction Permit 1294-004, Special Condition 2]
- 2) BACT for the emissions of particulate matter less than ten microns (PM₁₀) from the operation of each of these kilns is set at 0.015 gr/dscf at seven (7) percent oxygen (O₂). This shall be achieved by using a baghouse. [Construction Permit 1294-004, Special Condition 3]
- 3) BACT for the emissions of sulfur dioxide (SO₂) from the operation of each of these kilns is set at 90 pounds per hour. This shall be achieved by using the low sulfur fuel blend (described in Condition Numbers 5 and 6 of Construction Permit 1294-004). [Construction Permit 1294-004, Special Condition 4]
- 4) Maximum SO₂ emissions from each kiln will be 1.6 pounds per ton of product. The equivalent maximum percentage of sulfur in the fuel blend by weight will be 2.08%. [Construction Permit 1294-004, Special Condition 5]
- 5) The twelve month rolling average of SO₂ emissions will not exceed 1.40 pounds per ton of product. The equivalent twelve month rolling average percentage of sulfur in the fuel blend will not exceed 1.76%. [Construction Permit 1294-004, Special Condition 6]
- 6) BACT for the emissions of carbon monoxide from the operation of each of these kilns is set at 56.3 pounds per hour. This shall be achieved by using proper kiln design and proper operation. [Construction Permit 1294-004, Special Condition 7]
- 7) As an alternative to the nitrogen oxide emission limit expressed in pounds per ton of feed the emissions may comply with the following limit: the level of excess air shall be controlled to minimize nitrogen oxide emissions such that the oxygen content in exhaust of the exit of the kiln does not exceed 1 percent. [Construction Permit 1294-004, Special Condition 8]

Operational Limitation/Equipment Specifications:

- 1) The emissions from the kilns shall be controlled through use of fabric filters (baghouses), combustion practices, low excess air, and the natural tendency of the lime product to absorb SO₂. [Construction Permit 1294-004, Special Condition 1]
- 2) The baghouse controlling the kilns shall be operated in conformance with good engineering practices and the manufacturer's specifications, determined in accordance with Conditions Number 26 and 27. [Construction Permit 1294-004, Special Condition 12]

- 3) No gases shall be allowed to bypass any part of the operation unless approved by the Air Pollution Control Program. [Construction Permit 1294-004, Special Condition 24]
- 4) Should performance testing indicate non-compliance with applicable performance standards, the non-compliant kiln(s) shall not be operated for any reason except to provide data for further compliance testing. [Construction Permit 1294-004, Special Condition 31]

Performance Testing:

- 1) Emissions of a kiln shall be tested within 90 days of written request from the Air Pollution Control Program, as specified by the request. [Construction Permit 1294-004, Special Condition 16]
- 2) At least 30 days prior to date of the required test, Chemical Lime shall complete and return a Proposed Test Plan (available from the Missouri Air Pollution Control Program) to the Missouri Air Pollution Control Program. The Air Pollution Control Program shall determine whether a pre-test meeting shall be required and shall approve the Proposed Test Plan before Chemical Lime tests the kilns. [Construction Permit 1294-004, Special Condition 17]
- 3) The emissions tests shall be performed by an approved independent testing service during conditions which are representative of maximum emissions of the pollutant being measured. [Construction Permit 1294-004, Special Condition 18]
- 4) Prior to carrying out these tests, the Air Pollution Control Program regional office is to be notified a minimum of 30 days prior to the expected date of these tests and further notified a minimum of five working days prior to the test of the exact date, time and place of these tests, to enable the Air Pollution Control Program to observe these tests. [Construction Permit 1294-004, Special Condition 19]
- 5) The Final Report of these tests shall include as a minimum:
[Construction Permit 1294-004, Special Condition 20]
 - a) A tabular summary of results which includes: process weight rate (e.g. weight of stone, fuel), measured emission rate, emission factor calculated using the average test results in the terms of the applicable limits, for example in units of pounds pollutant emitted per ton of stone fed, and whether compliance is demonstrated.
 - b) Description of test methods and procedures used, including description of sampling train, analysis equipment, and test schedule.
 - c) Detailed description of test conditions, including: pertinent process information (e.g. fuel, raw material analysis)
 - d) Data and calculations, including copies of all raw data sheets and records of laboratory analysis, sample calculations, and data on equipment calibrations.

Monitoring:

- 1) Continuous Emission Monitors (CEMs) shall be installed, operated, and calibrated to monitor the SO₂ and O₂ in each kiln exit stack. [Construction Permit 1294-004, Special Condition 21]
- 2) Chemical Lime Company shall install, calibrate, maintain and operate a device for measuring the mass rate of stone feed to the kilns. The measuring device shall be accurate to within ± 5 percent of the mass rate over its operating range. The device is required to be operated during compliance emission tests. [Construction Permit 1294-004, Special Condition 25]
- 3) Chemical Lime Company shall monitor and record the operating pressure drop across each baghouse at least once every eight hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty. [Construction Permit 1294-004, Special Condition 26]
- 4) Chemical Lime Company shall monitor the sulfur content of the fuel being fired in the kilns. [Construction Permit 1294-004, Special Condition 28]

Recordkeeping:

- 1) Chemical Lime Company shall maintain an operating and maintenance log for each baghouse which shall include the following: [Construction Permit 1294-004, Special Condition 27]
 - a) incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - b) maintenance activities, with inspection schedule, repair actions, and replacements, etc.
- 2) Chemical Lime Company shall maintain records of the following items, and such other items as may be appropriate to allow the Air Pollution Control Program to review compliance with the requirements of this permit: [Construction Permit 1294-004, Special Condition 29]
 - a) limestone feed stock tons/day/kiln;
 - b) any additive by name tons/day/kiln;
 - c) fuel tons/day/kiln;
 - d) sulfur content of the fuel;
 - e) hours of operation per day if not continuous;
 - f) lime production tons/day/kiln; and
 - g) daily fugitive dust control measures including application of chemicals
- 3) Chemical Lime Company shall maintain a record of maintenance, calibration, and operation activity associated with all continuous monitoring equipment.

Reporting:

- 1) Reports shall be submitted monthly providing the 12-month rolling totals of SO₂ in pounds per ton of product. The report shall also outline the procedure used to convert the CEM data to pounds of SO₂ per ton of product. [Construction Permit 1294-004, Special Condition 21]
- 2) CEM certification protocols shall be submitted to the Air Pollution Control Program at least 30 days prior to the certification date. [Construction Permit 1294-004, Special Condition 23]
- 3) Calibration records of feed rate measuring device shall be submitted to the Air Pollution Control Program. [Construction Permit 1294-004, Special Condition 25]

Permit Condition EU0770-002 through EU0780-002

10 CSR 10-6.070
New Source Performance Regulations
40 CFR Part 60, Subpart HH
Standards of Performance for Lime Manufacturing Plants

Emission Limitation:

- 1) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any rotary lime kiln any gases which: [§60.342(a)]
 - a) Contain particulate matter in excess of 0.30 kilogram per megagram (0.60 lb/ton) of stone feed. [§60.342(a)(1)]
 - b) Exhibit greater than 15 percent opacity when exiting from a dry emission control device. [§60.342(a)(2)]

Test Methods and Procedures:

- 1) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). [§60.344(a)]

- 2) The owner or operator shall determine compliance with the particulate matter standards in §60.342(a) as follows: [§60.344(b)]
- a) The emission rate (E) of particulate matter shall be computed for each run using the following equation: [§60.344(b)(1)]

$$E = \frac{(C_s Q_{sd})}{PK}$$

where:

E = emission rate of particulate matter, kg/Mg (1b/ton) of stone feed.

C_s = concentration of particulate matter, g/dscm (gr/dscf).

Q_{sd} = volumetric flow rate of effluent gas, dscm/hr (dscf/hr).

P = stone feed rate, Mg/hr (ton/hr).

K = conversion factor, 1000 g/kg (7000 gr/lb).

- b) Method 5 shall be used at negative-pressure fabric filters and other types of control devices and Method 5D shall be used at positive-pressure fabric filters to determine the particulate matter concentration (C_s) and the volumetric flow rate (Q_{sd}) of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf). [§60.344(b)(2)]
- c) The monitoring device of §60.343(d) shall be used to determine the stone feed rate (P) for each run. [§60.344(b)(3)]
- d) Method 9 and the procedures in §60.11 shall be used to determine opacity. [§60.344(b)(4)]
- 3) During the particulate matter run, the owner or operator shall use the monitoring devices in §60.343(c)(1) and (2) to determine the average pressure loss of the gas stream through the scrubber and the average scrubbing liquid supply pressure. [§60.344(c)]

Monitoring:

- 1) The owner or operator of a facility that is subject to the provisions of this 40 CFR Part 60, Subpart HH shall install, calibrate, maintain, and operate a continuous monitoring system, except as provided in §60.343(b) and (c), to monitor and record the opacity of a representative portion of the gases discharged into the atmosphere from any rotary lime kiln. The span of this system shall be set at 80 percent opacity or greater. [§60.343(a) and 40 CFR 60, Appendix B, PS-1]
- 2) For the purpose of conducting a performance test under §60.8, the owner or operator of any lime manufacturing plant subject to the provisions of this subpart shall install, calibrate, maintain, and operate a device for measuring the mass rate of stone feed to any affected rotary lime kiln. The measuring device used must be accurate to within ±5 percent of the mass rate over its operating range. [§60.343(d)]

Reporting:

For the purpose of reports required under §60.7(c), periods of excess emissions that shall be reported are defined as all 6-minute periods during which the average opacity of the visible emissions from any lime kiln subject to §60.342(a) is greater than 15 percent. [§60.343(e)]

Permit Condition EU0770-003 through EU0780-003

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart AAAAA

National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants

Emission Limitation:

- 1) PM emissions from existing lime kilns and their associated lime coolers that did not have a wet scrubber installed and operating prior to January 5, 2004 must not exceed 0.12 pounds per ton of stone feed (lbs/tsf). [§63.7090(a) and Item 1 of Table 1 to 40 CFR Part 63, Subpart AAAAA]
- 2) All existing lime kilns and their associated coolers at your LMP, and you choose to average PM emissions, except that any kiln that is allowed to meet the 0.60 lb/tsf PM emission limit is ineligible for averaging, the weighted average PM emissions calculated according to Equation 2 in §63.7112 must not exceed 0.12 lb/tsf (if you are averaging only existing kilns). [§63.7090(a) and Item 4 of Table 1 to 40 CFR Part 63, Subpart AAAAA]

Operational Limitation

- 1) As required in §63.7090(b), for each lime kiln and each lime cooler (if there is a separate exhaust to the atmosphere from the associated lime cooler) equipped with a fabric filter (FF), you must maintain and operate the FF such that the bag leak detector system (BLDS) or PM detector alarm condition does not exist for more than 5 percent of the total operating time in a 6-month period; and comply with the requirements in §63.7113(d) through (f) and Table 5 to 40 CFR Part 63, Subpart AAAAA. In lieu of a BLDS or PM detector maintain the FF such that the 6-minute average opacity for any 6-minute block period does not exceed 15 percent; and comply with the requirements in §63.7113(f) and (g) and Table 5 to 40 CFR Part 63, Subpart AAAAA. [§63.7090(b) and Item 1 of Table 2 to 40 CFR Part 63, Subpart AAAAA]
- 2) As required in §63.7090(b), you must prepare a written OM&M plan; the plan must include the items listed in §63.7100(d) (see Permit Condition PW001) and the corrective actions to be taken when required in Table 5 to 40 CFR Part 63, Subpart AAAAA. [§63.7090(b) and Item 5 of Table 2 to 40 CFR Part 63, Subpart AAAAA]
- 3) For each emission unit equipped with an add-on air pollution control device, you must vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to an FF; and operate each capture/collection system according to the procedures and requirements in the OM&M plan. [§63.7090(b) and Item 6 of Table 2 to 40 CFR Part 63, Subpart AAAAA]

Performance Testing:

- 1) You must conduct a performance test within 5 years following the initial performance test and within 5 years following each subsequent performance test thereafter. [§63.7111]
- 2) As required in §63.7112, you must conduct each performance test in the following table: [§63.7112(a) and Table 4 to 40 CFR Part 63, Subpart AAAAA]

For...	You must...	Using...	According to the following requirements...
a) Each lime kiln and each associated lime cooler	Select the location of the sampling port and the number of traverse ports	Method 1 or 1A of appendix A to 40 CFR Part 60; and §63.6(d)(1)(i)	Sampling sites must be located at the outlet of the control device(s) and prior to any releases to the atmosphere.
b) Each lime kiln and	Determine velocity and	Method 2, 2A, 2C, 2D, 2F,	Not applicable.

For...	You must...	Using...	According to the following requirements...
each associated lime cooler	volumetric flow rate	or 2G in appendix A to 40 CFR Part 60	
c) Each lime kiln and each associated lime cooler	Conduct gas molecular weight analysis	Method 3, 3A, or 3B in appendix A to 40 CFR Part 60	Not applicable.
d) Each lime kiln and each associated lime cooler	Measure moisture content of the stack gas	Method 4 in appendix A to 40 CFR Part 60	Not applicable.
e) Each lime kiln and each associated lime cooler and which uses a negative pressure PM control device	Measure PM emissions	Method 5 in appendix A to 40 CFR Part 60	Conduct the test(s) when the source is operating at representative operating conditions in accordance with §63.7(e); the minimum sampling volume must be 0.85 dry standard cubic meter (dscm) (30 dry standard cubic foot (dscf)).
f) Each lime kiln and each associated lime cooler and which uses a positive pressure FF	Measure PM emissions	Method 5D in appendix A to 40 CFR Part 60	Conduct the test(s) when the source is operating at representative operating conditions in accordance with §63.7(e).
g) Each lime kiln	Determine the mass rate of stone feed to the kiln during the kiln PM emissions test	Any suitable device	Calibrate and maintain the device according to manufacturer's instructions; the measuring device used must be accurate to within ±5 percent of the mass rate of stone feed over its operating range.
h) Each lime kiln equipped with a FF that is monitored with a COMS	Have installed and have operating the COMS prior to the performance test	Standard operating procedures incorporated into the OM&M plan and as required by 40 CFR Part 63, subpart A, General Provisions and according to PS-1 of appendix B to 40 CFR Part 60, except as specified in §63.7113(g)(2)	According to the requirements in §63.7113(g).

- 3) Each performance test must be conducted according to the requirements in §63.7(e)(1) and under the specific conditions specified in Table 4 to 40 CFR Part 63, Subpart AAAAA (see Table above). [§63.7112(b)]
- 4) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1). [§63.7112(c)]
- 5) Except for opacity and VE observations, you must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour. [§63.7112(d)]
- 6) The emission rate of particulate matter (PM) from each lime kiln (and each lime cooler if there is a separate exhaust to the atmosphere from the lime cooler) must be computed for each run using Equation 1 of §63.7112: [§63.7112(e)]

$$E = \frac{(C_k Q_k + C_c Q_c)}{PK} \quad (Eq.1)$$

Where:

E = Emission rate of PM, pounds per ton (lb/ton) of stone feed.

C_k = Concentration of PM in the kiln effluent, grain/dry standard cubic feet (gr/dscf).

Q_k = Volumetric flow rate of kiln effluent gas, dry standard cubic feet per hour (dscf/hr).

C_c = Concentration of PM in the cooler effluent, grain/dscf. This value is zero if there is not a separate cooler exhaust to the atmosphere.

Q_c = Volumetric flow rate of cooler effluent gas, dscf/hr. This value is zero if there is not a separate cooler exhaust to the atmosphere.

P = Stone feed rate, tons per hour (ton/hr).

K = Conversion factor, 7000 grains per pound (grains/lb).

- 7) If you choose to meet a weighted average emission limit as specified in item 4 of Table 1 to 40 CFR Part 63 Subpart AAAAA, you must calculate a combined particulate emission rate from all kilns and coolers within your LMP using Equation 2 of §63.7112: [§63.7112(f)(1)]

$$E_T = \frac{\sum_{i=1}^n E_i P_i}{\sum_{i=1}^n P_i} \quad (Eq. 2)$$

Where:

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

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

P_i = Stone feed rate to kiln i, ton/hr.

n = Number of kilns you wish to include in averaging.

You do not have to include every kiln in this calculation, only include kilns you wish to average. Kilns that have a PM emission limit of 0.60 lb/tsf are ineligible for any averaging. [§63.7112(f)(2)]

Monitoring:

- 1) Monitoring installation, operation, and maintenance requirements [§63.7113]:
- a) You must install, operate, and maintain each continuous opacity monitoring system (COMS) as required by §63.7113(g). [§63.7113(a)]
 - b) For each emission unit equipped with an add-on air pollution control device, you must inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in item 6 of Table 2 to 40 CFR 63, Subpart AAAAA and record the results of each inspection. [§63.7113(f)]
 - c) For each COMS used to monitor an add-on air pollution control device, you must meet the requirements in §63.7113(g)(1) and (2). [§63.7113(g)]
 - i) Install the COMS at the outlet of the control device. [§63.7113(g)(1)]
 - ii) Install, maintain, calibrate, and operate the COMS as required by 40 CFR Part 63, subpart A, General Provisions and according to Performance Specification (PS)-1 of appendix B to 40 CFR Part 60. Facilities that operate COMS installed on or before February 6, 2001, may continue to meet the requirements in effect at the time of COMS installation unless specifically required to re-certify the COMS by their permitting authority. [§63.7113(g)(2)]

- 2) Monitoring and data collection to demonstrate continuous compliance [§63.7120]:
 - a) You must monitor and collect data according to §63.7120. [§63.7120(a)]
 - b) Except for monitor malfunctions, associated repairs, required quality assurance or control activities (including, as applicable, calibration checks and required zero adjustments), and except for PSH operations subject to monthly VE testing, you must monitor continuously (or collect data at all required intervals) at all times that the emission unit is operating. [§63.7120(b)]
 - c) Data recorded during the conditions described in §63.7120(c)(1) through (3) may not be used either in data averages or calculations of emission or operating limits; or in fulfilling a minimum data availability requirement. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system. [§63.7120(c)]
 - i) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments; [§63.7120(c)(1)]
 - ii) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies; and [§63.7120(c)(2)]
 - iii) Start-ups, shutdowns, and malfunctions. [§63.7120(c)(3)]
- 3) Continuous compliance demonstration with the emission limitations standards [§63.7121]
 - a) You must demonstrate continuous compliance with each emission limitation in Tables 1 and 2 to this subpart that applies to you according to the methods specified in Tables 5 to 40 CFR 63, Subpart AAAAA. [§63.7121(a)]
 - i) For each lime kiln or lime cooler equipped with a FF that uses a COMS as the monitoring device: [§63.7090(b) and Item 4 of Table 5 to 40 CFR Part 63, Subpart AAAAA]
 - (1) Maintain and operate the FF such that the average opacity for any 6-minute block period does not exceed 15 percent by installing, maintaining, calibrating and operating a COMS as required by 40 CFR Part 63, Subpart A, General Provisions and according to PS-1 of appendix B to 40 CFR Part 60, except as specified in §63.7113(g)(2); and
 - (2) Collecting the COMS data at a frequency of at least once every 15 seconds, determining block averages for each 6-minute period and demonstrating for each 6-minute block period the average opacity does not exceed 15 percent.
 - b) You must report each instance in which you did not meet each operating limit, opacity limit in Tables 2 and 6 to this subpart that applies to you. This includes periods of startup, shutdown, and malfunction. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in §63.7131. [§63.7121(b)]
 - c) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e). [§63.7121(d)]
 - d) For existing lime kilns and their associated coolers, you may perform VE measurements in accordance with EPA Method 9 of appendix A to 40 CFR Part 60 in lieu of installing a COMS or PM detector if any of the conditions in §63.7121 (f)(1) or (3) exist: [§63.7121(f)]
 - i) You use a FF for PM control, and the FF is under positive pressure and has multiple stacks; or [§63.7121(f)(1)]
 - ii) The control device exhausts through a monovent; or [§63.7121(f)(2)]
 - iii) The installation of a COMS in accordance with PS-1 of appendix B to 40 CFR Part 60 is infeasible. [§63.7121(f)(3)]

Recordkeeping:

- 1) Performance test results must be documented in complete test reports that contain the information required by §63.7112 (h)(1) through (10), as well as all other relevant information. The plan to be followed during testing must be made available to the Administrator at least 60 days prior to testing. [§63.7112(h)]
 - a) A brief description of the process and the air pollution control system; [§63.7112(h)(1)]
 - b) Sampling location description(s); [§63.7112(h)(2)]
 - c) A description of sampling and analytical procedures and any modifications to standard procedures; [§63.7112(h)(3)]
 - d) Test results, including opacity; [§63.7112(h)(4)]
 - e) Quality assurance procedures and results; [§63.7112(h)(5)]
 - f) Records of operating conditions during the test, preparation of standards, and calibration procedures; [§63.7112(h)(6)]
 - g) Raw data sheets for field sampling and field and laboratory analyses; [§63.7112(h)(7)]
 - h) Documentation of calculations; [§63.7112(h)(8)]
 - i) All data recorded and used to establish operating limits; and [§63.7112(h)(9)]
 - j) Any other information required by the test method. [§63.7112(h)(10)]
- 2) You must keep the records specified in §63.7132 a)(1) through (3). [§63.7132(a)]
 - a) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in §63.10(b)(2)(xiv). [§63.7132(a)(1)]
 - b) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. [§63.7132(a)(2)]
 - c) Records of performance tests, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii). [§63.7132(a)(3)]
- 3) You must keep the records required by Tables 5 to this subpart to show continuous compliance with each emission limitation that applies to you. [§63.7132(c)]
- 4) You must keep the records which document the basis for the initial applicability determination as required under §63.7081. [§63.7132(d)]
- 5) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). [§63.7133(a)]
- 6) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§63.7133(b)]
- 7) You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You may keep the records offsite for the remaining 3 years. [§63.7133(c)]

Reporting:

- 1) Notifications:
 - a) You must submit all of the notifications in §§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 to you, by the dates specified. [§63.7130(a)]
 - b) As specified in §63.9(b)(2), if you start up your affected source before January 5, 2004, you must submit an initial notification not later than 120 calendar days after January 5, 2004. [§63.7130(b)]
 - c) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, as required in §63.7(b)(1). [§63.7130(d)]

- d) If you are required to conduct a performance test, design evaluation, opacity observation, VE observation, or other initial compliance demonstration as specified in Table 3 or 4 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). [§63.7130(e)]
 - i) For each initial compliance demonstration required in Table 3 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration. [§63.7130(e)(1)]
 - ii) For each compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 4 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2). [§63.7130(e)(2)]
- 2) Reports:
 - a) You must submit each report listed in Table 7 to this subpart that applies to you. [§63.7131(a)]
 - b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date specified in Table 7 to this subpart and according to the requirements in §63.7131 (b)(1) through (5): [§63.7131(b)]
 - i) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7083 and ending on June 30 or December 31, whichever date is the first date following the end of the first half calendar year after the compliance date that is specified for your source in §63.7083. [§63.7131(b)(1)]
 - ii) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first half calendar year after the compliance date that is specified for your affected source in §63.7083. [§63.7131(b)(2)]
 - iii) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. [§63.7131(b)(3)]
 - iv) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. [§63.7131(b)(4)]
 - v) For each affected source that is subject to permitting regulations pursuant to part 70 or part 71 of this chapter, if the permitting authority has established dates for submitting semiannual reports pursuant to §§70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A) of this chapter, you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates specified in §63.7131 (b)(1) through (4). [§63.7131(b)(5)]
 - c) The compliance report must contain the information specified in §63.7131 (c)(1) through (6). [§63.7131(c)]
 - i) Company name and address. [§63.7131(c)(1)]
 - ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [§63.7131(c)(2)]
 - iii) Date of report and beginning and ending dates of the reporting period. [§63.7131(c)(3)]
 - iv) If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in §63.10(d)(5)(i). [§63.7131(c)(4)]

- v) If there were no deviations from any emission limitations (emission limit, operating limit, opacity limit) that apply to you, the compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. [§63.7131(c)(5)]
- vi) 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. [§63.7131(c)(6)]
- d) For each deviation from an emission limitation (emission limit, operating limit, opacity limit) that occurs at an affected source where you are not using a CMS to comply with the emission limitations in this subpart, the compliance report must contain the information specified in §63.7131 (c)(1) through (4) and §63.7131 (d)(1) and (2). The deviations must be reported in accordance with the requirements in §63.10(d). [§63.7131(d)]
 - i) The total operating time of each emission unit during the reporting period. [§63.7131(d)(1)]
 - ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [§63.7131(d)(2)]
- e) For each deviation from an emission limitation (emission limit, operating limit, opacity limit) occurring at an affected source where you are using a CMS to comply with the emission limitation in this subpart, you must include the information specified in §63.7131 (c)(1) through (4) and §63.7131 (e)(1) through (11). This includes periods of startup, shutdown, and malfunction. [§63.7131(e)]
 - i) The date and time that each malfunction started and stopped. [§63.7131(e)(1)]
 - ii) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks. [§63.7131(e)(2)]
 - iii) The date, time and duration that each CMS was out-of-control, including the information in §63.8(c)(8). [§63.7131(e)(3)]
 - 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. [§63.7131(e)(4)]
 - 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. [§63.7131(e)(5)]
 - 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. [§63.7131(e)(6)]
 - 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. [§63.7131(e)(7)]
 - viii) A brief description of the process units. [§63.7131(e)(8)]
 - ix) A brief description of the CMS. [§63.7131(e)(9)]
 - x) The date of the latest CMS certification or audit. [§63.7131(e)(10)]
 - xi) A description of any changes in CMS, processes, or controls since the last reporting period. [§63.7131(e)(11)]
- f) Each facility that has obtained a title V operating permit pursuant to part 70 or part 71 of this chapter must report all deviations as defined in this subpart in the semiannual monitoring report required by §§70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A) of this chapter. If you submit a compliance report specified in Table 7 to this subpart along with, or as part of, the semiannual monitoring

report required by §§70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A) of this chapter, and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation you may have to report deviations from permit requirements to the permit authority. [§63.7131(f)]

EU0810 - Limestone Screen		
Emission Unit	Description	2008 EIQ Reference #
EU0810	CLC41 (SN317) – Limestone Screen PM control device – Fabric filter (DC-321)	EP87

Permit Condition EU0810-001
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart AAAAA National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants

Emission Limitation:

- 1) PM stack emissions from all PSH operations at a new or existing affected source shall not exceed 0.05 grams per dry standard cubic meter (d/dscm).
[§63.7090(a) and Item 5 of Table 1 to 40 CFR Part 63, Subpart AAAAA]
- 2) Stack emissions from all PSH operations at a new or existing affected source, unless the stack emissions are discharged through a wet scrubber control device, must not exceed 7 percent opacity.
[§63.7090(a) and Item 6 of Table 1 to 40 CFR Part 63, Subpart AAAAA]

Operational Limitation

- 1) As required in §63.7090(b), you must prepare a written OM&M plan; the plan must include the items listed in §63.7100(d) (see Permit Condition PW001) and the corrective actions to be taken when required in Table 5 to 40 CFR Part 63, Subpart AAAAA.
[§63.7090(b) and Item 5 of Table 2 to 40 CFR Part 63, Subpart AAAAA]
- 2) As required in §63.7090(b), for each emission unit equipped with an add-on control device:
[§63.7090(b) and Item 5 of Table 2 to 40 CFR Part 63, Subpart AAAAA]
 - a) You must vent captured emissions through closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to the fabric filter (FF);
and
 - b) Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

Performance Testing:

- 1) You must conduct a performance test within 5 years following the initial performance test and within 5 years following each subsequent performance test thereafter. [§63.7111]
- 2) As required in §63.7112, for each stack emission from a PSH operation, you must measure PM emissions using Method 5 or Method 17 in Appendix A to 40 CFR Part 60 according to the following requirement: [Item 12 of Table 4 to 40 CFR Part 63, Subpart AAAAA]
 - a) The sample volume must be at least 1.70 dscm (60 dscf); for Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without

heaters; and if the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter (Method 17 may be used only with exhaust gas temperatures of not more than 250 °F).

- 3) As required in §63.7112, for each stack emission from a PSH operation, conduct opacity observations using Method 9 in Appendix A to 40 CFR Part 60 according to the following requirement. [Item 13 of Table 4 to 40 CFR Part 63, Subpart AAAAA]
 - a) The test duration must be for at least 3 hours and you must obtain at least thirty, 6-minute averages.
- 4) Each performance test must be conducted according to the requirements in 40 CFR §63.7(e)(1) and under the specific conditions specified in Table 4 to 40 CFR Part 63, Subpart AAAAA. [§63.7112(b)]
- 5) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR §63.7(e)(1). [§63.7112(c)]
- 6) Except for opacity and VE observations, you must conduct three separate test runs for each performance test required in this section, as specified in 40 CFR §63.7(e)(3). Each test run must last at least 1 hour. [§63.7112(d)]
- 7) Performance test results must be documented in complete test reports that contain the information required by §63.7112(h)(1) through (10), as well as all other relevant information. The plan to be followed during testing must be made available to the Administrator at least 60 days prior to testing. [§63.7112(h)]
 - a) A brief description of the process and the air pollution control system; [§63.7112(h)(1)]
 - b) Sampling location description(s); [§63.7112(h)(2)]
 - c) A description of sampling and analytical procedures and any modifications to standard procedures; [§63.7112(h)(3)]
 - d) Test results, including opacity; [§63.7112(h)(4)]
 - e) Quality assurance procedures and results; [§63.7112(h)(5)]
 - f) Records of operating conditions during the test, preparation of standards, and calibration procedures; [§63.7112(h)(6)]
 - g) Raw data sheets for field sampling and field and laboratory analyses; [§63.7112(h)(7)]
 - h) Documentation of calculations; [§63.7112(h)(8)]
 - i) All data recorded and used to establish operating limits; and [§63.7112(h)(9)]
 - j) Any other information required by the test method. [§63.7112(h)(10)]

Monitoring:

For each PSH operation subject to an opacity limit as specified in Table 1 to 40 CFR Part 63, Subpart AAAAA, and any vents from buildings subject to an opacity limit, you must conduct a visible emissions (VE) check according to item 1 in Table 6 to 40 CFR Part 63, Subpart AAAAA and as follows:

[§63.7121(e)]

- 1) Conduct visual inspections that consist of a visual survey of each stack or process emission point over the test period to identify if there are VE, other than condensed water vapor. [§63.7121(e)(1)]
- 2) Select a position at least 15 but not more 1,320 feet from the affected emission point with the sun or other light source generally at your back. [§63.7121(e)(2)]
- 3) The observer conducting the VE checks need not be certified to conduct EPA Method 9 in Appendix A to 40 CFR Part 60, but must meet the training requirements as described in EPA Method 22 of Appendix A to Part 60. [§63.7121(e)(3)]

- 4) For each PSH operation subject to 10 percent opacity limitation as required in Table 1 to 40 CFR Part 63, Subpart AAAAAA, you must demonstrate on going compliance:
[Item 1 of Table 6 to 40 CFR Part 63, Subpart AAAAAA]
- a) Conducting a monthly 1-minute VE check of each emission unit in accordance with §63.7121(e); the check must be conducted while the affected source is in operation;
 - b) If no VE are observed in 6 consecutive monthly checks for any emission unit, you may decrease the frequency of VE checking from monthly to semi-annually for that emission unit; if VE are observed during any semiannual check, you must resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks;
 - c) If no VE are observed during the semiannual check for any emission unit, you may decrease the frequency of VE checking from semi-annually to annually for that emission unit; if VE are observed during any annual check, you must resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks; and
 - d) VE are observed during any VE check, you must conduct a 6-minute test of opacity in accordance with Method 9 of appendix A to part 60 of this chapter; you must begin the Method 9 test within 1 hour of any observation of VE and the 6-minute opacity reading must not exceed the applicable opacity limit.

Reporting:

- 1) Notification - §63.7130
 - a) You must submit all of the notifications in §§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 to you, by the dates specified. [§63.7130(a)]
 - b) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, as required in §63.7(b)(1). [§63.7130(d)]
 - c) If you are required to conduct a performance test, design evaluation, opacity observation, VE observation, or other initial compliance demonstration as specified in Table 3 or 4 to 40 CFR Part 63, Subpart AAAAAA, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). [§63.7130(e)]
- 2) Reports - §63.7131
 - a) You must submit compliance report semiannually according to the requirements in §63.7131(b). If there are no deviations from opacity limit, the report must contain a statement that there were no deviations from the emission limitations during the reporting period. [§63.7131(a) and Item 1 of Table 7 to 40 CFR Part 63, Subpart AAAAAA]
 - b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date specified in Table 7 to this subpart and according to the requirements in §63.7131(b)(1) through (5). [§63.7131(b)]
 - i) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7083 and ending on June 30 or December 31, whichever date is the first date following the end of the first half calendar year after the compliance date that is specified for your source in §63.7083. [§63.7131(b)(1)]
 - ii) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first half calendar year after the compliance date that is specified for your affected source in §63.7083. [§63.7131(b)(2)]

- iii) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. [§63.7131(b)(3)]
- iv) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. [§63.7131(b)(4)]
- v) For each affected source that is subject to permitting regulations pursuant to part 70 or part 71 of this chapter, if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates specified in §63.7131(b)(1) through (4). [§63.7131(b)(5)]
- c) The compliance report must contain the information specified in §63.7131(c)(1) through (5). [§63.7131(c)]
 - i) Company name and address. [§63.7131(c)(1)]
 - ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [§63.7131(c)(2)]
 - iii) Date of report and beginning and ending dates of the reporting period. [§63.7131(c)(3)]
 - iv) If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in §63.10(d)(5)(i). [§63.7131(c)(4)]
 - v) If there were no deviations from emission limitations (opacity limit) that apply to you, the compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. [§63.7131(c)(5)]
- d) For each deviation from an emission limitation (opacity limit) that occurs at an affected source where you are not using a CMS to comply with the emission limitations in this subpart, the compliance report must contain the information specified in §63.7131(c)(1) through (4) and §63.7131(d)(1) and (2). The deviations must be reported in accordance with the requirements in §63.10(d). [§63.7131(d)]
 - i) The total operating time of each emission unit during the reporting period. [§63.7131(d)(1)]
 - ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [§63.7131(d)(2)]
- e) Each facility that has obtained a title V operating permit pursuant to 40 CFR Part 70 or 40 CFR Part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report specified in Table 7 to 40 CFR Part 63 Subpart AAAAAA along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation you may have to report deviations from permit requirements to the permit authority. [§63.7131(f)]

EU0820 – Lime Storage Silo Screen		
Emission Unit	Description	2008 EIQ Reference #
EU0820	CLC47 – Lime storage silo screen SN462 PM control device – Fabric filter (DC-466)	EP88

Permit Condition EU0820-001
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

- 1) The permittee shall not emit particulate matter in excess of 58.51 lbs/hr from EU0820.
- 2) No person shall cause, allow or permit the emission of particulate matter from any source in a concentration in excess of 0.30 grain per standard cubic foot of exhaust gases.

Monitoring/Recordkeeping/Reporting:

Not required (See Statement of Basis).

EU0840 – TP41 (Reject Bin BN411 Bin-Loadout) EU0880 – TP74 (Vin. Screen 534A to BC605) EU0920 – TP106 (BC632 to BC421) Lime Transfer Point		
Emission Unit	Description	2008 EIQ Reference #
EU0840	TP41 - Reject Bin BN411 Bin-Loadout PM control device – Fabric filter (DC-412)	EP41
EU0880	TP74 (Vin. Screen 534A to BC605) - Lime transfer from vin. Screen to belt conveyor PM control device – Fabric filter (DC-607)	EP97
EU0920	TP106 (BC632 to BN421) – Lime transfer from belt conveyor to BN421 PM control device – Fabric filter (DC-412)	EP140

Permit Condition EU0840-001, EU0880-001 and EU0920-001
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

- 1) The permittee shall not emit particulate matter in excess of:
 - a) 58.51 lbs/hr from EU0840;
 - b) 58.51 lbs/hr from EU0880; and
 - c) 58.51 lbs/hr from EU0920.
- 2) No person shall cause, allow or permit the emission of particulate matter from any source in a concentration in excess of 0.30 grain per standard cubic foot of exhaust gases.

Note: The emission rates in this permit condition apply to the sources individually and not the aggregated sources.

Monitoring/Recordkeeping/Reporting:

Not required (See Statement of Basis).

EU1000 through EU1080 - Lime Transfer Points (Conveyors)		
Emission Unit	Description	2008 EIQ Reference #
EU1000	TP119 (SN462 – DG465) - Transfer of lime from screen to diverter gate. PM control device – Fabric filter (DC-466)	EP221
EU1010	TP120 (DG470A – SN462) - Transfer of lime from diverter gate to screen. PM control device – Fabric filter (DC-466)	EP222
EU1030	TP122 (DG465 – BC473) - Transfer of lime from diverter gate to belt conveyor. PM control device – Fabric filter (DC-466)	EP224
EU1040	TP123 (SN462 – DG467) - Transfer of lime from screen to diverter gate. PM control device – Fabric filter (DC-466)	EP225
EU1050	TP124 (DG467 – BC463) - Transfer of lime from diverter gate to belt conveyor. PM control device – Fabric filter (DC-466)	EP226
EU1070	TP126 (SN462 – SC477) – Transfer of lime from screen to screw conveyor. PM control device – Fabric filter (DC-466)	EP228
EU1080	TP27 (SC477 – Lime Storage) – Transfer of lime from screw conveyor to Lime Storage. PM control device – Fabric filter (DC-466)	EP229

**Permit Condition EU1000-001 through EU1010-001,
 EU1030-001 through EU1050-001,
 and EU1070-001 through EU1080**

10 CSR 10-6.400

Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

- 1) The permittee shall not emit particulate matter in excess of:
 - a) 58.51 lbs/hr from EU1000 through EU1010 and EU1030 through EU1050; and
 - b) 56.12 lbs/hr from EU1070 through EU1080;
- 2) No person shall cause, allow or permit the emission of particulate matter from any source in a concentration in excess of 0.30 grain per standard cubic foot of exhaust gases.

Note: The emission rates in this permit condition apply to the sources individually and not the aggregated sources.

Monitoring/Recordkeeping/Reporting:

Not required (See Statement of Basis).

EU1090 – BM1 (Ball Mill BM206)		
Emission Unit	Description	2008 EIQ Reference #
EU1000	BM1 (Ball Mill BM206) – Coal Ball Mill. PM control device – Fabric filters (DC-211-1/DC211-2)	EP230

Permit Condition EU1090-001
10 CSR 10-6.070 New Source Performance Regulations 40 CFR Part 60 Subpart Y Standards of Performance for Coal Preparation Plants

Emission Limitation:

An owner or operator subject to the provisions of 40 CFR Part 60 Subpart Y shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit twenty percent (20%) opacity or greater. [§60.252(c)]

Monitoring:

- 1) The permittee shall conduct opacity readings on the emission unit(s) using the procedures contained in U.S. EPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit(s) is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
 - a) Monthly observations shall be conducted for a minimum of eight consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
 - b) Observations must be made once every two (2) months for a period of eight months. If a violation is noted, monitoring reverts to monthly. Should no violation of this regulation be observed during this period then-
 - c) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.
- 3) If the source reverts to monthly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

Record Keeping:

- 1) The permittee shall maintain records of all observation results (see Attachment B), noting:
 - a) Whether any air emissions (except for water vapor) were visible from the emission units,
 - b) All emission units from which visible emissions occurred, and
 - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions.
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment C)

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

Permit Condition EU1090-002

10 CSR 10-6.400
 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

- 1) The permittee shall not emit particulate matter in excess of 56.12 lbs/hr from EU1090.
- 2) No person shall cause, allow or permit the emission of particulate matter from any source in a concentration in excess of 0.30 grain per standard cubic foot of exhaust gases.

Monitoring/Recordkeeping/Reporting:

Not required (See Statement of Basis).

**EU1100 through EU1110
 - Emergency Reject Bin**

Emission Unit	Description	2008 EIQ Reference #
EU1100	TP68: Kiln Dust Bin - Truck	EP91
EU1110	TP70: Temp/Calibration Belt-Truck	EP93

Permit Condition EU1100-001 through EU1110-001

10 CSR 10-6.060 Construction Permits Required
 Construction Permit No. 092001-005

Emission Limitation:

Chemical Lime Company shall emit less than 15.0 tons of particulate matter less than ten microns in aerodynamic diameter (PM₁₀) from emission points 91 and 93 and stack DC-420 in any consecutive 12-month period. [Construction Permit 092001-005, Special Condition 1]

Monitoring/Recordkeeping:

Chemical Lime Company shall record the monthly and the sum of the most recent consecutive 12-months PM₁₀ emissions in tons from this equipment. These records shall be kept on-site for five (5) years and shall be made immediately available for inspection to Department of Natural Resources' personnel upon request. Attachment D, *Monthly PM₁₀ Emission Tracking Record*, or an equivalent form shall be used for this purpose. [Construction Permit 092001-005, Special Condition 2]

Reporting:

Chemical Lime Company shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176 Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which the records show that the emission limitation 1 has been exceeded.
 [Construction Permit 092001-005, Special Condition 3]

IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The following is only an excerpt from the regulation or code, and is provided for summary purposes only.

10 CSR 10-6.045 Open Burning Requirements

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
 - a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises, with the following exceptions:
 - i) Kansas City metropolitan area. The open burning of household refuse must take place in an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of Kansas City and every contiguous municipality;
 - ii) Springfield-Greene County area. The open burning of household refuse must take place outside the corporate limits of Springfield and only within areas zoned A-1, Agricultural District;
 - iii) St. Joseph area. The open burning of household refuse must take place within an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of St. Joseph; and
 - iv) St. Louis metropolitan area. The open burning of household refuse is prohibited;
 - b) Yard waste, with the following exceptions:
 - i) Kansas City metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation shall require an open burning permit;
 - ii) Springfield-Greene County area. The City of Springfield requires an open burning permit for the open burning of trees, brush or any other type of vegetation. The City of Springfield prohibits the open burning of tree leaves;
 - iii) St. Joseph area. Within the corporate limits of St. Joseph, the open burning of trees, tree leaves, brush or any other type of vegetation grown on a residential property is allowed during the following calendar periods and time-of-day restrictions:
 - (1) A three (3)-week period within the period commencing the first day of March through April 30 and continuing for twenty-one (21) consecutive calendar days;
 - (2) A three (3)-week period within the period commencing the first day of October through November 30 and continuing for twenty-one (21) consecutive calendar days;
 - (3) The burning shall take place only between the daytime hours of 10:00 a.m. and 3:30 p.m.; and
 - (4) In each instance, the twenty-one (21)-day burning period shall be determined by the Director of Public Health and Welfare of the City of St. Joseph for the region in which the City of St. Joseph is located provided, however, the burning period first shall receive the approval of the Department Director; and

- iv) St. Louis metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation is limited to the period beginning September 16 and ending April 14 of each calendar year and limited to a total base area not to exceed sixteen (16) square feet. Any open burning shall be conducted only between the hours of 10:00 a.m. and 4:00 p.m. and is limited to areas outside of incorporated municipalities;
- 3) Certain types of materials may be open burned provided an open burning permit is obtained from the Director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.
- 4) Chemical Lime Company may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least two hundred (200) yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if Chemical Lime Company fails to comply with the provisions or any condition of the open burning permit.
 - a) In a nonattainment area, as defined in 10 CSR 10-6.020, paragraph (2)(N)5., the Director shall not issue a permit under this section unless the owner or operator can demonstrate to the satisfaction of the Director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
- 5) Reporting and Record Keeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in 40 CFR 60.2245-60.2260. The provisions of 40 CFR Part 60 Subpart CCCC promulgated as of September 22, 2005 shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with NSPS 40 CFR 60.2245-60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the Director.
- 6) Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR Part 60, Appendix A–Test Methods, Method 9–Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR Part 60, Appendix A, Method 9 promulgated as of December 23, 1971 is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the Director within two business days, in writing, the following information:
 - a) Name and location of installation;
 - b) Name and telephone number of person responsible for the installation;
 - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - d) Identity of the equipment causing the excess emissions;
 - e) Time and duration of the period of excess emissions;
 - f) Cause of the excess emissions;
 - g) Air pollutants involved;
 - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;

- i) Measures taken to mitigate the extent and duration of the excess emissions; and
 - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information list to the Director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the Director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
 - 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under Section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the Director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under Section 643.080 or 643.151, RSMo.
 - 4) Nothing in this rule shall be construed to limit the authority of the Director or commission to take appropriate action, under Sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
 - 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065(6)(C)3.B]

10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61 Subpart M National Emission Standard for Asbestos

- 1) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.

- 2) The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information

- 1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) annually.
- 2) The permittee may be required by the Director to file additional reports.
- 3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 4) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079 to satisfy the requirements of the Federal Clean Air Act, Title V.
- 5) The permittee shall complete required reports on state supplied EIQ forms or in a form satisfactory to the Director and the reports shall be submitted to the Director by June 1 after the end of each reporting period.
- 6) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
- 7) The permittee shall collect, record and maintain the information necessary to complete the required forms during each year of operation of the installation.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.170

Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

Emission Limitation:

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the Director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.

- 3) Should it be determined that noncompliance has occurred, the Director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
 - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
 - b) Paving or frequent cleaning of roads, driveways and parking lots;
 - c) Application of dust-free surfaces;
 - d) Application of water; and
 - e) Planting and maintenance of vegetative ground cover.

Monitoring:

The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.

The permittee shall maintain the following monitoring schedule:

- 1) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
- 2) Should no violation of this regulation be observed during this period then-
 - a) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
 - b) If a violation is noted, monitoring reverts to weekly.
 - c) Should no violation of this regulation be observed during this period then-
 - i) The permittee may observe once per month.
 - ii) If a violation is noted, monitoring reverts to weekly.
- 3) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

Recordkeeping:

The permittee shall document all readings on Attachment A, or its equivalent, noting the following:

- 1) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
- 2) Whether the visible emissions were normal for the installation.
- 3) Whether equipment malfunctions contributed to an exceedance.
- 4) Any violations and any corrective actions undertaken to correct the violation.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

- 1) The Director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The Director may specify testing methods to be used in accordance with good professional practice. The Director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The Director may conduct tests of emissions of air contaminants from any source. Upon request of the Director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and 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.
- 3) The Director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-3.090 Restriction of Emission of Odors

This requirement is not federally enforceable.

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants¹

Emission Limitation:

- 1) No owner or other person shall cause or permit emissions to be discharged into the atmosphere from any new source any visible emissions with an opacity greater than 20%.
- 2) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%.

Monitoring:

- 1) The permittee shall conduct opacity readings on each emission unit using the procedures contained in U.S. EPA Test Method 22. The permittee is only required to take readings when the emission unit is operating and when the weather conditions allow. If the permittee observes no visible or other significant emissions using these procedures, then no further observations are required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The permittee must maintain the following monitoring schedule:
 - a) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
 - b) Should the permittee observe no violations of this regulation during this period then-
 - i) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
 - ii) If a violation is noted, monitoring reverts to weekly.
 - iii) Should no violation of this regulation be observed during this period then-
 - (1) The permittee may observe once per month.
 - (2) If a violation is noted, monitoring reverts to weekly.
- 3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

Recordkeeping:

The permittee shall maintain records of all observation results using Attachment B (or its equivalent), noting:

- 1) Whether any air emissions (except for water vapor) were visible from the emission units;
- 2) All emission units from which visible emissions occurred;
- 3) Whether the visible emissions were normal for the process;
- 4) The permittee shall maintain records of any equipment malfunctions, which may contribute to visible emissions; and,
- 5) The permittee shall maintain records of all USEPA Method 9 opacity tests performed.

¹ 10 CSR 10-6.220 does not apply to emission units regulated by 40 CFR Part 60, Subparts Y and HH and 40 CFR Part 63, Subpart AAAAA.

10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the Department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the Department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the Department. Certain business entities that meet the requirements for state-approved exemption status must allow the Department to monitor training classes provided to employees who perform asbestos abatement.

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
 - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
 - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.

- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
- 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

10 CSR 10-6.280 Compliance Monitoring Usage

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Any other monitoring methods approved by the Director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a) Applicable monitoring or testing methods, cited in:
 - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 - ii) 10 CSR 10-6.040, "Reference Methods";
 - iii) 10 CSR 10-6.070, "New Source Performance Standards";
 - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
 - b) Other testing, monitoring, or information gathering methods, if approved by the Director, that produce information comparable to that produced by any method listed above.

V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

10 CSR 10-6.065(6)(C)1.B Permit Duration

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements

- 1) Record Keeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
 - b) The permittee shall submit a report of all required monitoring by:
 - i) October 1st for monitoring which covers the January through June time period, and
 - ii) April 1st for monitoring which covers the July through December time period.
 - iii) Exception. Monitoring requirements which require reporting more frequently than semi annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
 - c) Each report shall identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
 - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

- ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

- 1) June 21, 1999;
- 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
- 3) The date on which a regulated substance is first present above a threshold quantity in a process.

10 CSR 10-6.065(6)(C)1.F Severability Clause

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

10 CSR 10-6.065(6)(C)1.G General Requirements

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to

the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios

None.

10 CSR 10-6.065(6)(C)3 Compliance Requirements

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
 - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
 - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, as well as the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
 - a) The identification of each term or condition of the permit that is the basis of the certification;
 - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;

- c) Whether compliance was continuous or intermittent;
- d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
- e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065(6)(C)6 Permit Shield

- 1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
 - a) The application requirements are included and specifically identified in this permit, or
 - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- 2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
 - a) The provisions of Section 303 of the Act or Section 643.090, RSMo concerning emergency orders,
 - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
 - c) The applicable requirements of the acid rain program,
 - d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
 - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

10 CSR 10-6.065(6)(C)7 Emergency Provisions

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
 - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
 - b) That the installation was being operated properly,
 - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
 - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(6)(C)8 Operational Flexibility

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable

under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- 1) Section 502(b)(10) changes. Changes that, under Section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), record keeping, reporting or compliance requirements of the permit.
 - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the Air Pollution Control Program as soon as possible after learning of the need to make the change.
 - b) The permit shield shall not apply to these changes.

10 CSR 10-6.065(6)(C)9 Off-Permit Changes

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
 - b) The permittee must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
 - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and

- d) The permit shield shall not apply to these changes.

10 CSR 10-6.020(2)(R)12 Responsible Official

The application utilized in the preparation of this permit was signed by Robert Kerr, Plant Manager. On September 10, 2009, the Air Pollution Control Program was informed that Mr. Tom Reeder, Plant Manager is now the responsible official. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) The Missouri Department of Natural Resources or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
 - a) The permit has a remaining term of less than three years;
 - b) The effective date of the requirement is later than the date on which the permit is due to expire;or
 - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
- 5) The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065(6)(E)1.C Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

VI. Attachments

Attachments follow.

Attachment C

Method 9 Opacity Emissions Observations								
Company					Observer			
Location					Observer Certification Date			
Date					Emission Unit			
Time					Control Device			
Hour	Minute	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							
SUMMARY OF AVERAGE OPACITY								
Set Number	Time				Opacity			
	Start	End	Sum	Average				

Readings ranged from _____ to _____ % opacity.

Was the emission unit in compliance at the time of evaluation? _____
 YES NO Signature of Observer

STATEMENT OF BASIS

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Application, received September 25, 2006;
- 2) Initial P70 Operating Permit OP2002-014, issued March 12, 2002;
- 3) 2008 Emissions Inventory Questionnaire;
- 4) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition;
- 5) Construction Permit 1298-023, Temporary Permit for transfer of Iron Ore;
- 6) Construction Permit 012000-021, Temporary Permit for Coal Hopper;
- 7) Construction Permit 012001-004, Temporary Permit for Coal Hopper; and
- 8) Construction Permit 092001-005A; Amendment to construction permit 092001-005, Correction the project description;

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

None

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

10 CSR 10-6.100, *Alternate Emission Limits*

This rule is not applicable because the installation is in an ozone attainment area.

Construction Permit Revisions

The following revisions were made to construction permits for this installation:

Construction Permit No. 1294-004:

Special Condition 13:

Since coal-related items will not be controlled by baghouses due to safety concerns, the statement "fuel cleaning material handling - unloading, bulk fuel storage bins" is removed from Special Condition 13. Inherent moisture is high enough for this to not be an issue.

Special Condition 22:

This condition has not been included in this permit because Chemical Lime has installed a Flow Monitor on each kiln stack and the withdrawal duct to the coal mill system to measure mass flow from each kiln. This was completed in 1998 and these instruments are certified annually and approved by The Missouri Department of Natural Resources. They are much more accurate than the flow calculation curve originally stated in the Construction Permit.

New Source Performance Standards (NSPS) Applicability

10 CSR 10-6.070, *New Source Performance Regulations*

1) 40 CFR Part 60, Subpart Y – *Standards of Performance for Coal Preparation Plants*

This standard is applicable to any of the following affected facilities in coal preparation plants which process more than 200 tons per day and commenced construction or modification after October 24, 1974: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems and coal transfer and loading systems. The coal processing and conveying equipment are subject to the requirements of this standard.

2) 40 CFR Part 60, Subpart HH – *Standards of Performance for Lime Manufacturing Plants*

The provisions of this subpart are applicable to each rotary lime kiln used in the manufacture of lime. This subpart applies to kilns that commenced construction or modification after May 3, 1977, and the two rotary kilns were constructed after the applicability date of this subpart, therefore are subject to the requirements of Subpart HH.

§60.343(a) of Subpart HH specifies that the span settings for opacity monitors associated with Kiln #1 and Kiln #2 shall be set with an opacity span of 40%. 40 CFR Part 60, Appendix B, Performance Specification-1 (PS-1) specifies that monitors subject to this regulation shall have the span set to 80% or greater. In 2008 Chemical Lime Company's Ste. Genevieve Plant replaced the existing opacity monitors with new units. Since these units were installed after the latest revision of PS-1 and the PS-1 was written since Subpart HH, and the Lime MACT (40 CF 63, Subpart AAAAA) states that opacity monitors must meet PS-1 requirements, the opacity monitors were set with a span of 100% as per PS-1 regulation. The initial compliance testing reports were submitted to the Missouri Department of Natural Resources for these monitors. To avoid these conflicts the Subpart HH span setting of 40% is not included in this permit.

3) 40 CFR Part 60, Subpart OOO – *Standards of Performance for Nonmetallic Mineral Processing Plants*

This standard is applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants that commences construction or modification after August 31, 1983: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station.

A nonmetallic mineral processing plant is defined in §60.671 as any combination of equipment that is used to crush or grind any nonmetallic mineral. Chemical Lime receives its stone from Tower Rock Stone which is then stored on-site and fed into the Rotary Kiln. Stone is not quarried nor crushed on site. Therefore, the equipment that is used to transfer, screen or store limestone is not subject to the NSPS Subpart OOO.

Maximum Available Control Technology (MACT) Applicability

1) 40 CFR Part 63, Subpart A — *General Provisions*

Table 8 to 40 CFR Part 63, Subpart AAAAA, specifies the provisions of subpart A of Part 63 that apply to owners and operators of sources subject to the provisions of Subpart AAAAA.

2) 40 CFR Part 63, Subpart AAAAA – *National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants*

The provisions of this subpart apply to lime manufacturing plant (LMP) that is a major source, or that is located at, or is part of, a major source of hazardous air pollutant (HAP) emissions. The affected sources subject to this regulation are:

- Each lime kiln(s) and their associated cooler(s); and
- Processed stone handling (PSH) operations system(s) located at an LMP that is a major source.

According to 40 CFR Part 63, Subpart AAAAA – PSH operations system(s) includes all equipment associated with PSH operations beginning at the processed stone storage bin(s) or open storage pile(s) and ending where the processed stone is fed into the kiln. It includes man-made processed stone storage bins (but not open processed stone storage piles), conveying system transfer points, bulk loading or unloading systems, screening operations, surge bins, bucket elevators, and belt conveyors. No other materials processing operations are subject to this subpart.

Emissions from the lime kilns and associated lime coolers system pass through the same air pollution dust collector and are vented through the same stack.

The lime kilns and associated lime coolers and the PSH operations system(s) are subject to the requirements of this standard. Therefore, the MACT is included in the operating permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

10 CSR 10-6.080, *Emission Standards for Hazardous Air Pollutants*

40 CFR Part 61 Subpart M – *National Emission Standard for Asbestos*, §61.145(a), Standard for demolition and renovation, applies to the installation.

Compliance Assurance Monitoring (CAM) Applicability

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

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
 - Uses a control device to achieve compliance, and
 - Has pre-control emissions that exceed or are equivalent to the major source threshold.
- 1) Chemical Lime Company's emission units were evaluated against the criteria listed above. Many of the emission units satisfy the first two criteria mentioned, while the remaining units have potential pre-control device emissions that are below the 100 ton per year major source thresholds as shown in the table below. Therefore, CAM is not applicable to any of of Chemical Lime Company's emission units upon permit renewal.
 - 2) The kilns are the only emission units that have pre-control PM emissions above the major source threshold. Since these units are subject to 40 CFR Part 63, Subpart AAAAA standards and units that are subject to 111 or 112 standards promulgated after November 15, 1990 are excluded from CAM, therefore the kilns are not subject to CAM.
 - 3) There are no control devices as defined by CAM for NO_x or CO emissions from the kilns, therefore CAM is not applicable.

**CHEMICAL LIME COMPANY, STE. GENEVIEVE, MISSOURI
CAM APPLICABILITY CALCULATIONS**

Emission Point	Transfer Points		Control	Capture Efficiency	Material Handled	U	M	PM EF (lb/ton)	Potential Thruput	PM PTE (tpy)	CAM Applicable?	Reason	
	From	To											
1	TP1	Truck	Hopper	Waterspray	NA-Fugitive	Limestone	5.46	1	0.007006694	400 tph	--	No	No Control Device
2	TP2	Hopper	Belt Feeder 303	Waterspray	NA-Fugitive	Limestone	5.46	1	0.007006694	400 tph	--	No	No Control Device
3	TP3	Belt Feeder 303	BC305	Underground	NA-Fugitive	Limestone	5.46	1	0.007006694	400 tph	--	No	No Control Device
4	TP4	BC305	DG306	Waterspray	NA-Fugitive	Limestone	5.46	1	0.007006694	600 tph	--	No	No Control Device
5	TP5	DG306	BC307	Waterspray	NA-Fugitive	Limestone	5.46	1	0.007006694	600 tph	--	No	No Control Device
6	TP6	DG306	BC308	Waterspray	NA-Fugitive	Limestone	5.46	1	0.007006694	600 tph	--	No	No Control Device
7	TP7	BC307	S. Pile	Waterspray	NA-Fugitive	Limestone	5.46	1	0.007006694	600 tph	--	No	No Control Device
8	TP8	BC308	N. Pile	Waterspray	NA-Fugitive	Limestone	5.46	1	0.007006694	600 tph	--	No	No Control Device
9	TP9	BC315 Tunnel Front		Underground	NA-Enclosed	Limestone	1	1	0.000771192	400 tph	--	No	No Control Device
10	TP10	BC315 Tunnel Back		Underground	NA-Enclosed	Limestone	1	1	0.000771192	400 tph	--	No	No Control Device
11	TP11	BC315	DG316	DC321	NA-Enclosed	Limestone	1	1	0.000771192	400 tph	1.351	No	< 100 TPY Threshold
12	TP12	DG316	Screen	DC321	NA-Enclosed	Limestone	1	1	0.000771192	400 tph	1.351	No	< 100 TPY Threshold
13	TP13	Screen	BC322	DC321	NA-Enclosed	Limestone	1	1	0.000771192	400 tph	1.351	No	< 100 TPY Threshold
15	TP15	Chat Bin	Loadout	None	NA-Fugitive	Limestone	5.46	1	0.007006694	400 tph	12.276	No	< 100 TPY Threshold
16	TP16	BC322	DG324	DC323	NA-Enclosed	Limestone	1	1	0.000771192	400 tph	1.351	No	< 100 TPY Threshold
17	TP17	DG324	BC325	DC323	NA-Enclosed	Limestone	1	1	0.000771192	400 tph	1.351	No	< 100 TPY Threshold
18	TP18	BC325	West Stone Bin	KVS-DC110-2	NA-Enclosed	Limestone	1	1	0.000771192	400 tph	1.351	No	< 100 TPY Threshold
21	TP21	DG324	East Stone Bin	KVS-DC110-1	NA-Enclosed	Limestone	1	1	0.000771192	400 tph	1.351	No	< 100 TPY Threshold
26	TP26	Dolime Bin	Loadout	DC512	NA-Enclosed	Dolime	1	0.25	0.005370895	500 tph	11.762	No	< 100 TPY Threshold
27	TP27	Dolime Bin	BC530	DC512	NA-Enclosed	Dolime	1	0.25	0.005370895	500 tph	11.762	No	< 100 TPY Threshold
28	TP28	Cooler East	DG401	DC407	NA-Enclosed	Lime	1	0.25	0.005370895	400 tph	9.410	No	< 100 TPY Threshold
29	TP29	Cooler West	DG402	DC407	NA-Enclosed	Lime	1	0.25	0.005370895	400 tph	9.410	No	< 100 TPY Threshold

**CHEMICAL LIME COMPANY, STE. GENEVIEVE, MISSOURI
CAM APPLICABILITY CALCULATIONS**

Emission Point	Transfer Points		Control	Capture Efficiency	Material Handled	U	M	PM EF (lb/ton)	Potential Thruput	PM PTE (tpy)	CAM Applicable?	Reason	
	From	To											
30	TP30	DG402	BC404	DC407	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
31	TP31	DG402	BC403	DC407	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
32	TP32	DG401	BC403	DC407	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
33	TP33	DG401	BC404	DC407	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
34	TP34	BC403	DG405	DC422	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
35	TP35	BC404	DG406	DC422	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
36	TP36	DG405	BC413	DC422	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
37	TP37	DG406	BC413	DC422	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
38	TP38	DG405	BC409	DC422	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
39	TP39	DG406	BC409	DC422	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
40	TP40	BC409	DG460	DC450	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
41	TP41	Reject Bin (BN-411)	Loadout	DC412	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	--	No	Not subject to any limitations
42	TP42	Dust Bin (BN-411)	BC530	DC512	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
43	TP43	BC413	Lime Storage	DC419	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
44	TP44	BC530 Tunnel Front		DC512	NA-Enclosed	Lime	1	0.25	0.005370895	800 tph	18.820	No	< 100 TPY Threshold
45	TP45	BC530	DG531	DC536	NA-Enclosed	Lime	1	0.25	0.005370895	800 tph	18.820	No	< 100 TPY Threshold
46	TP46	DG531	BC535	DC536	NA-Enclosed	Lime	1	0.25	0.005370895	800 tph	18.820	No	< 100 TPY Threshold
47	TP47	BC535	BC538	DC537	NA-Enclosed	Lime	1	0.25	0.005370895	800 tph	18.820	No	< 100 TPY Threshold
47a	TP47	BC535	BC538	DC537C	NA-Enclosed	Lime	1	0.25	0.005370895	800 tph	18.820	No	< 100 TPY Threshold
48	TP48	BC538	Loadout	DC542	NA-Enclosed	Lime	1	0.25	0.005370895	800 tph	18.820	No	< 100 TPY Threshold
49	TP49	DG531	Loadout Bin	DC536	NA-Enclosed	Lime	1	0.25	0.005370895	800 tph	18.820	No	< 100 TPY Threshold
50	TP50	Loadout Bin	Loadout	DC536	NA-Enclosed	Coal	1	24.5	8.75649E-06	400 tph	--	No	Not subject to any

**CHEMICAL LIME COMPANY, STE. GENEVIEVE, MISSOURI
CAM APPLICABILITY CALCULATIONS**

Emission Point	Transfer Points		Control	Capture Efficiency	Material Handled	U	M	PM EF (lb/ton)	Potential Thruput	PM PTE (tpy)	CAM Applicable?	Reason	
	From	To											
51	TP51	HO621	BC622	None	NA-Enclosed	Coal/Coke	1	24.5	8.75649E-06	400 tph	--	No	No Control Device limitations
52	TP52	BC622	BC535	None	NA-Enclosed	Coal/Coke	1	24.5	8.75649E-06	400 tph	--	No	No Control Device
53	TP53	BC535	BC605	None	NA-Enclosed	Coal/Coke	1	24.5	8.75649E-06	400 tph	--	No	No Control Device
54	TP54	DG608	SI611	DC610	NA-Enclosed	Dolime/lime	1	0.25	0.005370895	400 tph	9.410	No	< 100 TPY Threshold
55	TP55	BC530 Tunnel Back		DC512	NA-Enclosed	Dolime/lime	1	0.25	0.005370895	800 tph	18.820	No	< 100 TPY Threshold
56	TP56	Rail Hopper (HO601)	BF603	None	NA-Fugitive	Coal/Coke	5.46	24.5	7.95574E-05	800 tph	0.279	No	< 100 TPY Threshold
57	TP56	Rail Hopper (HO601)	BF603	None	NA-Fugitive	Coal/Coke	5.46	24.5	7.95574E-05	800 tph	0.279	No	< 100 TPY Threshold
58	TP56	Rail Hopper (HO601)	BF603	DC607	NA-Enclosed	Dolime/lime	1	0.25	0.005370895	800 tph	18.820	No	< 100 TPY Threshold
59	TP57	BF603	BC605	None	NA-Fugitive	Coal/Coke	5.46	24.5	7.95574E-05	200 tph	0.070	No	< 100 TPY Threshold
60	TP57	BF603	BC605	None	NA-Fugitive	Coal/Coke	5.46	24.5	7.95574E-05	200 tph	0.070	No	< 100 TPY Threshold
61	TP57	BF603	BC605	DC607	NA-Enclosed	Dolime/lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
62	TP58	BC605	DG608	None	NA-Fugitive	Coal/Coke	5.46	24.5	7.95574E-05	400 tph	0.139	No	< 100 TPY Threshold
63	TP58	BC605	DG608	None	NA-Fugitive	Coal/Coke	5.46	24.5	7.95574E-05	400 tph	0.139	No	< 100 TPY Threshold
64	TP58	BC605	DG608	DC609	NA-Enclosed	Dolime/lime	1	0.25	0.005370895	400 tph	9.410	No	< 100 TPY Threshold
65	TP59	DG608	BC612	None	NA-Enclosed	Coal/Coke	1	24.5	8.75649E-06	40 tph	--	No	No Control Device
66	TP59	DG608	BC612	None	NA-Enclosed	Coal/Coke	1	24.5	8.75649E-06	400 tph	--	No	No Control Device
67	TP60	BC612	DG613	DC615	NA-Enclosed	Coal/Coke	1	24.5	8.75649E-06	400 tph	0.015	No	< 100 TPY Threshold
68	TP60	BC612	DG613	DC615	NA-Enclosed	Coal/Coke	1	24.5	8.75649E-06	400 tph	0.015	No	< 100 TPY Threshold
69	TP61	DG613	North Fuel Silo	DC615	NA-Enclosed	Coal/Coke	1	24.5	8.75649E-06	400 tph	0.015	No	< 100 TPY Threshold
70	TP62	DG613	BC614	DC615	NA-Enclosed	Coal/Coke	1	24.5	8.75649E-06	400 tph	0.015	No	< 100 TPY Threshold
71	TP63	BC614	South Fuel Silo	DC615	NA-Enclosed	Coal/Coke	1	24.5	8.75649E-06	400 tph	0.015	No	< 100 TPY Threshold
72	TP64	North Fuel Silo	BC204	None	NA-Enclosed	Coal/Coke	1	24.5	8.75649E-06	400 tph	--	No	No Control Device

**CHEMICAL LIME COMPANY, STE. GENEVIEVE, MISSOURI
CAM APPLICABILITY CALCULATIONS**

Emission Point	Transfer Points		Control	Capture Efficiency	Material Handled	U	M	PM EF (lb/ton)	Potential Thruput	PM PTE (tpy)	CAM Applicable?	Reason	
	From	To											
73	TP65	South Fuel Silo	BC204	None	NA-Enclosed	Coal/Coke	1	24.5	8.75649E-06	400 tph	--	No	No Control Device
74	TP66	BC204 (coal)	Ball Mill	None	NA-Enclosed	Coal/Coke	1	24.5	8.75649E-06	400 tph	--	No	No Control Device
75	TP66	BC204 (coke)	Ball Mill	None	NA-Enclosed	Coal/Coke	1	24.5	8.75649E-06	400 tph	--	No	No Control Device
90	TP67	TR hopper	BC305	Waterspray	NA-Fugitive	Limestone	5.46	1	0.007006694	400 tph	--	No	No Control Device
91	TP68	Kiln Dust Bin	Truck	None	NA-Fugitive	Lime	5.46	0.25	0.048797448	100 tph	--	No	Not subject to any limitations
92	TP69	BC461	Lime Screen	DC466	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
96	TP73	Screen 462	BC463&BC473	DC466	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
97	TP74	Vin. Screen 534A	BC 605	DC607	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
122	TP94	DG460	DG460A	DC450	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
123	TP95	DG460A	BN411	DC420	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
124	TP96	BN411	SC508	DC512	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
125	TP97	DG460A	BN431	DC420	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
126	TP98	DG460	BC461	DC450	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
127	TP99	BC463	Lime Storage	DC419	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
128	TP100	DG485	BC473	DC466	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
129	TP101	BC473	Lime Storage	DC419	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
130	TP102	SC534D	BC605	None	NA-Enclosed	Lime	1	0.25	0.005370895	100 tph	--	No	No Control Device
131	TP103	BF203-1	BC204	None	NA-Enclosed	Coal/Coke	1	24.5	8.75649E-06	50 tph	--	No	No Control Device
132	TP104	BF203-2	BC204	None	NA-Enclosed	Coal/Coke	1	24.5	8.75649E-06	50 tph	--	No	No Control Device
133	TP107	Loader	Hopper	None	NA-Fugitive	Coal/Coke	5.46	24.5	7.95574E-05	200 tph	--	No	No Control Device
134	TP108	Hopper	BC605	None	NA-Fugitive	Coal/Coke	5.46	24.5	7.95574E-05	200 tph	--	No	No Control Device

**CHEMICAL LIME COMPANY, STE. GENEVIEVE, MISSOURI
CAM APPLICABILITY CALCULATIONS**

Emission Point	Transfer Points		Control	Capture Efficiency	Material Handled	U	M	PM EF (lb/ton)	Potential Thruput	PM PTE (tpy)	CAM Applicable?	Reason	
	From	To											
139	TP105	BC631	BC632	None	NA-Enclosed	Dolime	1	0.25	0.005370895	100 tph	--	No	No Control Device
140	TP106	BC632	BN421	DC412	NA-Enclosed	Dolime	1	0.25	0.002540288	100 tph	1.113	No	< 100 TPY Threshold
142	TP109	BC21	BC22	Waterspray	NA-Fugitive	Limestone	5.46	1	0.007006694	400 tph	--	No	No Control Device
143	TP110	BC22	BC23	Waterspray	NA-Fugitive	Limestone	5.46	1	0.007006694	400 tph	--	No	No Control Device
144	TP111	BC23	Storage Pile 1	Waterspray	NA-Fugitive	Limestone	5.46	1	0.007006694	400 tph	--	No	No Control Device
145	TP112	BC23	Storage Pile 2	Waterspray	NA-Fugitive	Limestone	5.46	1	0.007006694	400 tph	--	No	No Control Device
146	TP113	BC23	Storage Pile 3	Waterspray	NA-Fugitive	Limestone	5.46	1	0.007006694	400 tph	--	No	No Control Device
150	TP117	Storage Piles	BC385	Underground	NA-Enclosed	Limestone	1	1	0.000771192	400 tph	--	No	No Control Device
87	CLC41	Chat Bin Screen		DC321	100%	Limestone	5.46	1	0.007006694	400 tph	12.276	No	< 100 TPY Threshold
88	CLC47	Lime Storage Silo Screen SN462		DC466	100%	Lime	5.46	0.25	0.048797448	200 tph	42.747	No	< 100 TPY Threshold
220	TP118	SN462	Ground	None	NA-Fugitive	Lime	5.46	0.25	0.048797448	200 tph	--	No	No Control Device
221	TP119	SN462	DG465	DC466	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
222	TP120	DG470A	SN462	DC466	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
223	TP121	DG465-	BE470	DC466	NA-Enclosed	Lime	1	0.25	0.005370895	90 tph	2.117	No	< 100 TPY Threshold
224	TP122	DG465	BC473	DC466	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
225	TP123	SN462	DG467	DC466	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
226	TP124	DG467	BC463	DC466	NA-Enclosed	Lime	1	0.25	0.005370895	200 tph	4.705	No	< 100 TPY Threshold
227	TP125	DG467	BE470	DC466	NA-Enclosed	Lime	1	0.25	0.005370895	90 tph	2.117	No	< 100 TPY Threshold
228	TP126	SN462	SC477	DC466	NA-Enclosed	Lime	1	0.25	0.005370895	160 tph	3.764	No	< 100 TPY Threshold
229	TP127	SC477	Lime Storage	DC466	NA-Fugitive	Lime	5.46	0.25	0.048797448	160 tph	34.197	No	< 100 TPY Threshold
230	BM1	BM206	Ball Mill Stack	DC211-1/DC211-2	NA-Enclosed	Coal/Coke	1	24.5	8.75649E-06	160 tph	0.006	No	< 100 TPY Threshold
81	S1	North Limestone Storage Pile		Surfactant/Water	NA-Fugitive	Limestone	5.46	1			--	No	Not subject to any limitations

**CHEMICAL LIME COMPANY, STE. GENEVIEVE, MISSOURI
CAM APPLICABILITY CALCULATIONS**

Emission Point	Transfer Points		Control	Capture Efficiency	Material Handled	U	M	PM EF (lb/ton)	Potential Thruput	PM PTE (tpy)	CAM Applicable?	Reason
	From	To										
82	S2	South Limestone Storage Pile	Surfactant/Water	NA-Fugitive	Limestone	5.46	1			--	No	Not subject to any limitations
84	S4	Waste Dump Pile	Surfactant/Water	NA-Fugitive	Limestone	5.46	1			--	No	Not subject to any limitations
152	S5	West Pile (Wind Erosion)	Surfactant/Water	NA-Fugitive	Limestone	5.46	1			--	No	Not subject to any limitations
153	S6	Middle Pile (Wind Erosion)	Surfactant/Water	NA-Fugitive	Limestone	5.46	1			--	No	Not subject to any limitations
154	S7	East Pile (Wind Erosion)	Surfactant/Water	NA-Fugitive	Limestone	5.46	1			--	No	Not subject to any limitations
85	R1	Limestone Haul Road (In)	Surfactant/Water	NA-Fugitive	Limestone	5.46	1		225 tph	--	No	Not subject to any limitations
86	R2	Lime Haul Road (Out)	Surfactant/Water	NA-Fugitive	Limestone	5.46	1		225 tph	--	No	Not subject to any limitations

$E = k \times (0.0032) \times (U/5)^{1.3} / (M/2)^{1.4}$ (lb/ton material transferred) where:

k = 0.35 for PM10, 0.74 for PM

U = mean wind speed (mph) = 5.46 for open transfer points and 1.0 for enclosed transfer points. The 5.46 mph wind speed is based on meteorological data provided by Chemical Lime.

M = mean material moisture content = 1% for limestone; 0.25% for lime and dolime; 24.5% for coal/coke; Moisture content values taken from AP 42 13.2.4-1 (1/95) and site data

DC = dust collector; BC = belt conveyor; DG = diverter gate

**CHEMICAL LIME COMPANY, STE. GENEVIEVE, MISSOURI
 CAM APPLICABILTY CALCULATIONS**

Emission Point	Transfer Point	Emission Unit	Control Unit	MHDR (tons/hr)	Sox EF (lbs/ton)	Sox Control	NOx EF (lbs/ton)	NOx Control	CO EF (lbs/ton)	CO Control	SOx Emissions (tpy)	NOx Emissions (tpy)	CO Emissions (tpy)
76	K1	Kiln#1	DC110-1	56.25	1.4	Inherent Dry Scrubbing*	2	Proper kiln design and operation	1	Proper kiln design and operation	344.925	492.75	246.375
77	K2	Kiln#2	DC110-2	56.25	1.4	Inherent Dry Scrubbing*	2	Proper kiln design and operation	1	Proper kiln design and operation	344.925	492.75	246.375

Emission Factors are from AP-42, §11.17-6 (2/98)

*Note that dry scrubbing occurs naturally in the kiln and the kiln fabric filter when the caustic lime (calcium oxide) reacts with the acidic sulfur dioxide. The fabric filter is inherent to the process and is not considered a control device.

There are no control devices as defined by CAM for NOx or CO, therefore CAM is not applicable.

Other Regulatory Determinations

- 1) The units listed in the “Emission Units Without Limitations” section in the front of this permit either have no applicable regulations associated with them or are considered insignificant activities by the operating permit application.
- 2) 10 CSR 10-6.220, Restriction of Emission of Visible Air Contaminants, is included as a core permit requirement since it is currently applicable to all emission units with limitations in this permit except those subject to NSPS and MACT opacity standards.
- 3) 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*
 - a) The following units are regulated by 40 CFR Part 63, Subpart AAAAAA regulation which is more stringent than 10 CSR 10-6.400. Therefore, 10 CSR 10-6.400 is not made applicable.

Emission Unit #	EIQ Reference #	Description of Emission Unit
EU0130	EP13	TP13 (Screen-BC322)
EU0150	EP16	TP16 (BC322-DG324)
EU0160	EP17	TP17 (DG324-BC325)
EU0170	EP18	TP18 (BC325-West Stone Bin)
EU0200	EP21	TP21 (DG324-East Stone Bin)
EU0810	EP87	CLC41 (SN317)
EU0770	EP76	K1 (Kiln#1)
EU0780	EP77, 78	K2 (Kiln#2)

- b) According to 10 CSR 10-6.400(1)(B)7., the following fugitive sources are not subject to this rule.

Emission Unit #	EIQ Reference #	Description of Emission Unit
EU0010	EP01	TP1 (Truck-Hopper)
EU0020	EP02	TP2 (Hopper-Belt Feeder 303)
EU0030	EP03	TP3 (Belt Feeder 303-BC305)
EU0040	EP04	TP4 (BC305-DG306)
EU0050	EP05	TP5 (DG306-BC307)
EU0060	EP06	TP6 (DG306-BC308)
EU0070	EP07	TP7 (BC307 to S.Pile)
EU0080	EP08	TP8 (BC308 to N.Pile)
EU0090	EP09	TP9 (BC315 Tunnel Front)
EU0100	EP10	TP10 (BC315 Tunnel Back)
EU0140	EP15	TP15 (Chat BN318 Bin - Loadout)
EU0580	EP130	TP102 (SC534D – BC605) – Lime transfer from screw conveyor to belt conveyor
EU0590	EP51	TP51 (HO621-BC622)
EU0600	EP52	TP52 (BC622-BC535)

Emission Unit #	EQ Reference #	Description of Emission Unit
EU0610	EP53	TP53 (BC535-BC605)
EU0645	EP56/57	TP56 (Rail Hopper HO601-BF603)
EU0655	EP59/60	TP57 (BF603-BC605)
EU0665	EP62/63	TP58 (BC605-DG608)
EU0670	EP65/66	TP59 (DG608-BC612)
EU0830	EP90	TP67 (T.R. Hopper-BC305)
EU0890	EP133	TP107 (Loader to Hopper) - Lime transfer from loader to hopper
EU0720	EP72	TP64 (SI201-1-BF203-1)
EU0730	EP73	TP65 (SI201-2-BF203-2)
EU0740	EP131	TP103 (BF203-1 –BC204)
EU0750	EP132	TP104 (BF203-2 –BC204)
EU0760	EP74/75	TP66 (BC204-Ball Mill)
EU0890	EP133	TP107 (Loader to Hopper) - Lime transfer from loader to hopper
EU0900	EP134	TP108(Hopper to BC605) - Lime transfer from hopper to belt conveyor
EU0910	EP139	TP105 (BC631 to BC632)
EU0930	EP142	TP109 (BC21 to BC22)
EU0940	EP143	TP110 (BC22 to BC23)
EU0950	EP144	TP111 (BC23 to Storage Pile 1)
EU0960	EP145	TP112 (BC23 to Storage Pile 2)
EU0970	EP146	TP113 (BC23 to Storage Pile 3)
EU0980	EP150	TP117 (Storage Piles to BC385)
EU0990	EP220	TP118 (SN462 – Ground)
EU1100	EP91	TP68 – Kiln Dust Bin-Truck
EU1110	EP93	TP70: Temp/Calibration Belt-Truck
	EP85	R1 - (Limestone Haul Road (In))
	EP86	R2 - (Lime Haul Road (Out))
	EP50	TP50 - (Loadout BN532 Bin-Loadout)
	EP81	S1 – North Limestone Storage Pile
	EP82	S2 – South Limestone Storage Pile
	EP84	S4 – Waste Dump Pile
	EP91	TP68 – Kiln Dust Bin-Truck

c) 10 CSR 10-6.400 limits the amount of particulate matter that is allowed from an emission unit, and is dependent on the process weight rate material processed. The emission units to which this rule applies are listed below. The following calculations provide the allowable particulate emission rate based on 10 CSR 10-6.400 and the potential (maximum) emission rate including particulate emission control equipment. Potentials to emit presented below were calculated based on sources Maximum Design Rate (MDR). If the emissions from these emission units can not violate the limits of this rule then evidence of this is demonstrated in the following calculations.

One of the following equations from 10 CSR 10-6.400 is used to calculate the PM allowable limit:

$E = 4.10P^{0.67}$ for process weight rates up to 30 tons (60,000 lbs) per hour, and

$E = 55.0P^{0.11} - 40$ for process weight rates greater than 30 tons (60,000 lbs) per hour

Where: E = rate of emission in lb/hr; and

P = process weight rate in tons/hr (maximum hourly design rate)

At maximum design rates, the uncontrolled potential PM emission rates for the units listed in the table below based on the emission factor from equation 1 of AP-42 Section 13.2.4 are less than their corresponding allowable PM emission limits. No monitoring, record keeping or reporting is required.

Emission Unit No.	Max. Design Rate (ton/hr)	Control Device		PM Uncontrolled EF (lb/ton)	PM Emission			
		Type	Capture Efficiency (%)		Control Efficiency (%)	Uncontrolled (lb/hr)	Controlled (lb/hr)	Limit (lb/hr)
EU0110	400	Fabric Filter	100	99.5	0.00077	0.31	0.002	66.31
EU0120	400	Fabric Filter	100	99.5	0.00077	0.31	0.002	66.31
EU0250	500	Fabric Filter	100	99.5	0.00537	2.69	0.013	68.69
EU0260	500	Fabric Filter	100	99.5	0.00537	2.69	0.013	68.69
EU0270	400	Fabric Filter	100	99.5	0.00537	2.15	0.011	66.31
EU0280	400	Fabric Filter	100	99.5	0.00537	2.15	0.011	66.31
EU0290	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0300	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0310	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0320	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0330	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0340	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0350	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0360	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0370	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0380	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0390	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0400	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0410	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0420	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0430	200	Drum Wetter	100	99.5	0.00537	1.07	0.005	58.51
EU0440	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0450	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0460	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0470	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0480	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0490	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0500	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0510	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0520	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0530	800	Fabric Filter	100	99.5	0.00537	4.30	0.021	74.74
EU0540	800	Fabric Filter	100	99.5	0.00537	4.30	0.021	74.74

Emission Unit No.	Max. Design Rate (ton/hr)	Control Device			PM Uncontrolled EF (lb/ton)	PM Emission		
		Type	Capture Efficiency (%)	Control Efficiency (%)		Uncontrolled (lb/hr)	Controlled (lb/hr)	Limit (lb/hr)
EU0550	800	Fabric Filter	100	99.5	0.00537	4.30	0.021	74.74
EU0560	800	Fabric Filter	100	99.5	0.00537	4.30	0.021	74.74
EU0570	800	Fabric Filter	100	99.5	0.00537	4.30	0.021	74.74
EU0620	400	Fabric Filter	100	99.5	0.00537	2.15	0.011	66.31
EU0630	800	Fabric Filter	100	99.5	0.00537	4.30	0.021	77.74
EU0640	800	Fabric Filter	100	99.5	0.00537	4.30	0.021	77.74
EU0650	200	Fabric Filter	100	99.5	0.00537	1.07	0.005	58.51
EU0660	400	Fabric Filter	100	99.5	0.00537	2.15	0.011	66.31
EU0820	200	Fabric Filter	100	99.0	4.88E-02	9.76	0.10	58.51
EU0840	200	Fabric Filter	100	99.0	5.37E-03	1.07	0.01	58.51
EU0880	200	Fabric Filter	100	99.0	5.37E-03	1.07	0.01	58.51
EU0920	200	Fabric Filter	100	99.0	2.54E-03	0.51	0.005	58.51
EU1000	200	Fabric Filter	100	99.0	5.37E-03	1.07	0.01	58.51
EU1010	200	Fabric Filter	100	99.0	5.37E-03	1.07	0.01	58.51
EU1020	200	Fabric Filter	100	99.0	5.37E-03	1.07	0.01	58.51
EU1030	200	Fabric Filter	100	99.0	5.37E-03	1.07	0.01	58.51
EU1040	200	Fabric Filter	100	99.0	5.37E-03	1.07	0.01	58.51
EU1050	200	Fabric Filter	100	99.0	5.37E-03	1.07	0.01	58.51
EU1070	160	Fabric Filter	100	99.0	5.37E-03	0.86	0.01	56.12
EU1080	160	Fabric Filter	100	99.0	4.88E-02	0.86	0.01	56.12
EU1090	160	Fabric Filter	100	99.0	4.88E-02	0.86	0.01	56.12

At maximum design rates, the uncontrolled potential PM emission rates for the units listed in the table below based on based on the emission factor from equation 1 of AP-42 Section 13.2.4 are less than the allowed exemption level of 10 CSR 10-6.400(1)(B)11. (i.e., 0.5 lbs/hr), therefore these units are not subject to the provisions of this rule.

Emission Unit No.	Max. Design Rate (ton/hr)	Control Device			PM Uncontrolled EF (lb/ton)	PM Emission		
		Type	Capture Efficiency (%)	Control Efficiency (%)		Uncontrolled (lb/hr)	Controlled (lb/hr)	Limit (lb/hr)
EU0110	400	Fabric Filter	100	99.5	0.00077	0.31	0.002	66.31
EU0120	400	Fabric Filter	100	99.5	0.00077	0.31	0.002	66.31
EU0680	400	Fabric Filter	100	99.5	8.76E-06	0.04	1.75E-05	66.31
EU0690	400	Fabric Filter	100	99.5	8.76E-06	0.04	1.75E-05	66.31
EU0700	400	Fabric Filter	100	99.5	8.76E-06	0.04	1.75E-05	66.31
EU0710	400	Fabric Filter	100	99.5	8.76E-06	0.04	1.75E-05	66.31
EU1020	90	Fabric Filter	100	99.0	5.37E-03	0.48	4.83E-03	50.23
EU1060	90	Fabric Filter	100	99.0	5.37E-03	0.48	4.83E-03	50.23

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

1. The specific pollutant regulated by that rule is not emitted by the installation;
2. The installation is not in the source category regulated by that rule;
3. The installation is not in the county or specific area that is regulated under the authority of that rule;
4. The installation does not contain the type of emission unit which is regulated by that rule;
5. The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the Air Pollution Control Program a schedule for achieving compliance for that regulation(s).

Prepared by:

Berhanu A. Getahun
Environmental Engineer