

## STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0045-AOP-R4 AFIN: 32-00014

1. PERMITTING AUTHORITY:

Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, Arkansas 72118-5317

2. APPLICANT:

Arkansas Lime Company  
600 Limedale Road  
Batesville, Arkansas 72503

3. PERMIT WRITER:

Paula Parker

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Limestone Quarry and Lime Manufacturing  
NAICS Code: 212312 and 32741

5. SUBMITTALS: 12/28/07; 1/28/08; 4/4/08; 4/7/08; 4/22/08; 4/23/08; 4/24/08; 5/2/08

6. REVIEWER'S NOTES:

- Reduce the frequency of testing for PM<sub>10</sub>, CO, and NO<sub>x</sub>, at the rotary kiln sources, SN-11Q, SN-24Q, and SN-30Q from annual testing to once every five years.

The facility has tested these sources annually and have consistently shown compliance with permitted emission limits. Standard practice for testing is on a five-year interval.

- Increase the tons of limestone products (including but not limited to Ag-Lime) per consecutive 12 month period at Ag-Lime Loadout to Truck, SN-22Q, from 100,000 to 200,000

Estimated emissions from the source itself at the higher loading rate are less than 0.1 lb/hr and 0.1 tpy. Since the source is already permitted for those emission rates, there is no change to permitted emissions. The hourly throughput of 40 tons is not changing, only the annual throughput limit will be increasing to 200,000 tons.

- Clarify particulate testing for the rotary kiln sources, SN-11Q, SN-24Q, and SN-30Q.
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The facility has requested clarification of particulate testing requirements. The previous permit revision added Method 202 testing but cited such testing requirements inaccurately as either NSPS, MACT, or BACT. NSPS HH requires a one-time test for particulate using Method 5 and 5D, whereas MACT AAAAA requires these tests to be repeated every five years. All kiln sources have completed their NSPS testing requirements.

SN-11Q is an existing source under the MACT (began before December 2002); SN-24Q and SN-30Q are new sources. The #1 kiln, SN-11Q, was not significant for particulate at the time of permitting. The #2 kiln, SN-24Q, was significant for particulate, but only Method 5 testing for BACT was required. The #3 kiln was significant for particulate and was required to perform both Method 5 and 202 testing to show compliance with the BACT limit and emission limit.

The facility has requested that compliance with emission limits and BACT for all kilns (that have a particulate BACT limit) be based upon Method 5 testing only. While this is acceptable for the #1 and #2 kilns; the #3 kiln, has, since the time of its permitting in 2005, been required to perform both Method 5 and 202. The BACT limit should have considered both condensable and filterable particulate or the facility should have submitted an application for reconsideration of the PSD limits.

The permit has been modified to require periodic (5-yr) Method 5 testing to show compliance with the particulate emission limits for both SN-11Q and SN-24Q. MACT periodic compliance requirements for all three kilns are noted in the relevant MACT testing condition. Method 5 shall also be used for BACT compliance at SN-24Q. Method 202 testing requirements, to be performed simultaneously with Method 5, will be used for emission inventory purposes only. For the #3 kiln, Method 5 and 202 testing for emission limit compliance as well as BACT will not be changed.

- Clarify language for operation of water sprays.

The language in several conditions is misleading on the location of water spray controls. The only spray controls are located at SN-01 (primary crusher), SN-02 (secondary crusher), and SN-10Q (kiln feed screen). The language for SN-09, SN-4Q, SN-7Q, SN-22Q, and SN-1P have been amended to state that fugitive emissions from these sources are to be reduced by using water sprays upstream in the process.

- Change the Coal/Coke Rail Dump, SN-19Q, to the Coal/Coke Receiving Area to account for truck transfer unloading.

In addition to rail unloading, truck unloading of coal or coke also takes place in the area. Emission factors for truck unloading are more conservative than conveyor transfer, therefore, there are no permitted emission changes.

- Modify the emission rates at the Coal/Coke Storage Pile (SN-20) to account for a larger pile.
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The permitted emissions for this source remain unchanged, though actual emissions have increased.

- Clarify opacity language to require action to be taken only if visible emissions exceed the opacity limits.

Several opacity conditions required action to be taken if any visible emissions were observed. This has been changed to state that if visible emissions in excess of permitted limits are observed then corrective action is required.

- Add Dribble Chutes storage pile to the sources at SN-04Q.
- Add previously Insignificant Activities, The Emergency Lime Stockpile, the LKD Stockpile, and the Hydrate Rejects Discharge, to the sources at SN-04Q.

Several sources - The Emergency Lime Stockpile, the LKD Stockpile, and the Hydrate Rejects Discharge- were previously considered insignificant sources and are now permitted under SN-04Q. Emission increases at this source are 7.81 tpy PM and 3.9 tpy PM<sub>10</sub>.

- Remove SN-15P and SN-16P, Rice Lime Screen & Crusher and Lime Storage Tank Loadouts, from the list of permitted sources.

These sources and their associated Specific Conditions have been removed from the permit. Emission decreases due to their removal are 2.0 tpy particulates.

- Add several Insignificant Activities.

The facility had requested several insignificant activities, which resulted in a restructuring of A-13 activities because of emission limitations for all such sources claimed as such. The following are now claimed as A-13 activities: Lime Cooler Rejects Discharge, Dribble Chute Discharge, Railcar Cleanout, Blast Hole Drilling, Quarry Blasting, Portable Conveyor, and Big Bag Filling. The facility also added a 8,000 gallon Diesel Storage Tank (A-3), a 1,000 gallon Diesel Storage Tank (A-3), and a 200 gallon Diesel Storage Tank (A-2). The facility requested to permit an emergency, 350 HP, diesel-fired generator as an A-13. The source does not operate over 500 hours per year.

Total Plantwide emission increases for all modifications in this permit revision are 6.71 tpy PM and 2.2 tpy PM<sub>10</sub>.

## 7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.

The facility is currently under no enforcement actions.

8. PSD APPLICABILITY:

a. Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N

b. Is the facility categorized as a major source for PSD? Y  
*Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list?*

If yes, explain why this permit modification not PSD?

There are no PSD significant emission increases and there are no changes to BACT emission limits or control equipment.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
01Q, 02Q, 03Q, 07Q, 09Q, 10Q, 27Q, 31Q, 35Q, 36Q, 01P, 19P, 30P, 33P, 34P, and 36P	PM and PM <sub>10</sub>	40 CFR 60, Subpart OOO New Source Performance Standards for Non Metallic Mineral Processing Plants
11Q, 24Q, and 30Q	PM and PM <sub>10</sub>	40 CFR 60, Subpart HH New Source Performance Standards for Lime Manufacturing Plants
21Q, 28Q, and Coal systems	PM and PM <sub>10</sub>	40 CFR 60, Subpart Y New Source Performance Standards for Coal Preparation Plants
07Q, 11Q, 24Q, 27Q, 30Q, and 35Q	PM and PM <sub>10</sub>	40 CFR 63, Subpart AAAAA National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants
11Q, 24Q, 25Q, 26Q, 27Q, 28Q, 30Q through 39Q	PM, PM <sub>10</sub> , SO <sub>2</sub> , CO, NO <sub>x</sub>	40 CFR 52 Prevention of Significant Deterioration
11Q, 13Q, 15Q, 24Q, 25Q, 32Q, 12P, 18P, and 19P	PM and PM <sub>10</sub>	40 CFR 64 Compliance Assurance Monitoring

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. MODELING:

Criteria Pollutants. Met data from 2002-2006 were used along with background particulate data from the closest monitor to Batesville, which is North Little Rock. Annual Av of 21 and a 24-hr, 2<sup>nd</sup> High of 42.

Pollutant	Emission Rate (lb/hr)	NAAQS Standard ( $\mu\text{g}/\text{m}^3$ )	Averaging Time	Highest Concentration ( $\mu\text{g}/\text{m}^3$ )	% of NAAQS
PM <sub>10</sub>	56.3	50	Annual	19.58	82%
		150	24-Hour	102.02	96%

The following modeling results were performed as part of the review for the R3 permit.

Pollutant	Emission Rate (lb/hr)	NAAQS Standard ( $\mu\text{g}/\text{m}^3$ )	Averaging Time	Highest Concentration ( $\mu\text{g}/\text{m}^3$ )	% of NAAQS
SO <sub>2</sub>	215.4	80	Annual	2.29	2.86%
		1300	3-Hour	53.4	4.01%
		365	24-Hour	13.3	3.64%
CO	258.7	10,000	8-Hour	269.0	2.69%
		40,000	1-Hour	269.0	0.67%
NO <sub>x</sub>	301.6	100	Annual	2.91	2.91%

Non-Criteria Pollutants: All non-criteria pollutant modeling was performed as part of the review for the R3 permit.

1<sup>st</sup> Tier Screening (PAER)

Estimated hourly emissions from the following sources were compared to the Presumptively Acceptable Emission Rate (PAER) for each compound. The Department has deemed the PAER to be the product, in lb/hr, of 0.11 and the Threshold Limit Value ( $\text{mg}/\text{m}^3$ ), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV ( $\text{mg}/\text{m}^3$ )	PAER (lb/hr) = $0.11 \times \text{TLV}$	Proposed lb/hr	Pass?
HCl	2.98	0.32	24.0	N

2<sup>nd</sup> Tier Screening (PAIL)

ISCST3 air dispersion modeling was performed on the estimated hourly emissions from the following sources, in order to predict ambient concentrations beyond the property boundary. The Presumptively Acceptable Impact Level (PAIL) for each compound has been deemed by the Department to be one one-hundredth of the Threshold Limit Value as listed by the ACGIH.

Pollutant	PAIL ( $\mu\text{g}/\text{m}^3$ ) = 1/100 of Threshold Limit Value	Modeled Concentration ( $\mu\text{g}/\text{m}^3$ )	Pass?
HCl	3.2	0.0023	YES

## 12. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01Q	AP-42, Section 11.19.2	0.00124 lb PM/ton 0.00059 lb PM <sub>10</sub> /ton	None	n/a	
02Q	AP-42, Section 11.19.2	0.00124 lb PM/ton 0.00059 lb PM <sub>10</sub> /ton	None	n/a	
03Q	AP-42, Section 11.19.2	0.00176 lb PM/ton 0.00084 lb PM <sub>10</sub> /ton	None	n/a	
04Q	EPA's Control of Open Fugitive Dust Sources	See document	None	n/a	
05Q	AP-42, Section 11.19.2-2	0.00021 lb PM/ton 0.00010 lb PM <sub>10</sub> /ton	None	n/a	
06Q	AP-42, Section 12.2.1 and 12.2.2	Factor based on usage	None	n/a	
07Q	AP-42, Section 11.19.2-2	Numerous Factors	None	n/a	
09Q	AP-42, Section 11.19.2	0.00176 lb PM/ton 0.00084 lb PM <sub>10</sub> /ton	None	n/a	
10Q	AP-42, Section 11.19.2	0.00176 lb PM/ton 0.00084 lb PM <sub>10</sub> /ton	None	n/a	
11Q	PM MACT PM <sub>10</sub> MACT SO <sub>2</sub> Mass balance VOC AP-42 CO BACT levels NO <sub>x</sub> BACT levels	0.12 lb/tsf 0.12 lb/tsf 3% by weight 0.6 lb/ton 3.0 lb/ton produced 3.5 lb/ton produced	Dust Coll. Dry Scrub	99% PM 92% SO <sub>2</sub>	
12aQ	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	
12bQ	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	
13Q	Grain Loading	0.010 gr/dscf	Dust Coll.	99% PM	

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
14Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	
15Q	AP-42, Section 11.19.2	0.00061 lb PM/ton 0.00043 lb PM <sub>10</sub> /ton	Dust Coll.	99% PM	
16Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	
17Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	
18Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	
19Q	FIRE 6.23	0.0030 lb PM/ton 0.0009 lb PM <sub>10</sub> /ton	None	n/a	
20a/bQ	AP-42, Section 11.19.2	0.14910 lb PM/ton 0.07100 lb PM <sub>10</sub> /ton	None	n/a	
21Q	AP-42, Section 11.19.2-2	0.00294 lb PM/ton 0.00140 lb PM <sub>10</sub> /ton	None	n/a	
22Q	AP-42, Section 11.19.2-2	0.0021 lb PM/ton 0.0001 lb PM <sub>10</sub> /ton	None	n/a	
24Q	PM MACT PM <sub>10</sub> MACT SO <sub>2</sub> Mass balance VOC AP-42 CO BACT levels NO <sub>x</sub> BACT levels	0.10 lb/tsf 0.10 lb/tsf 3% by weight 0.6 lb/ton 3.0 lb/ton produced 3.5 lb/ton produced	Dust Coll. Dry Scrub	99% PM 92% SO <sub>2</sub>	
25Q	Grain Loading	0.010 gr/dscf	Dust Coll.	99% PM	
26Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	
27Q	AP-42, Section 11.19.2-2	0.000402 lb PM/ton 0.00019 lb PM <sub>10</sub> /ton	None	n/a	
28Q	AP-42, Section 11.19.2-2	0.00118 lb PM/ton 0.00557 lb PM <sub>10</sub> /ton	None	n/a	
29Q	AP-42, Section 12.2.1 and 12.2.2	Factor based on usage	None	n/a	
30Q	PM MACT PM <sub>10</sub> MACT SO <sub>2</sub> Mass balance VOC AP-42 CO BACT levels NO <sub>x</sub> BACT levels	0.10 lb/tsf 0.10 lb/tsf 3% by weight 0.6 lb/ton 3.0 lb/ton produced 3.5 lb/ton produced	Dust Coll. Dry Scrub	99% PM 92% SO <sub>2</sub>	
31Q	AP-42, Section 11.19.2-2	0.00268 lb PM/ton 0.00127 lb PM <sub>10</sub> /ton	None	n/a	
32Q	Grain Loading	0.010 gr/dscf	Dust Coll.	99% PM	

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
33Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	
34Q	AP-42, Section 11.19.2-2	0.000441 lb PM/ton 0.00021 lb PM <sub>10</sub> /ton	None	n/a	
35Q	AP-42, Section 11.19.2-2	0.000402 lb PM/ton 0.00019 lb PM <sub>10</sub> /ton	None	n/a	
36Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	
37Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	
38Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	
39Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	
40Q	AP-42, Section 11.19.2-2	0.0159 lb PM/ton 0.00754 lb PM <sub>10</sub> /ton	None	n/a	
41Q	AP-42, Section 11.19.2-2	0.0159 lb PM/ton 0.00754 lb PM <sub>10</sub> /ton	None	n/a	
01P	AP-42, Section 11.19.2-2	0.0915 lb PM/ton 0.0915 lb PM <sub>10</sub> /ton	None	n/a	
12P	Grain Loading and Natural Gas factors	0.020 gr/dscf	Dust Coll.	99% PM	
13P	Grain Loading	0.020 gr/dscf	Dust Coll.	99% PM	
14P	AP-42, Section 11.19.2-2	0.0915 lb PM/ton 0.0915 lb PM <sub>10</sub> /ton	None	n/a	
18P	Grain Loading and Natural Gas factors	0.020 gr/dscf	Dust Coll.	99% PM	
19P	Grain Loading and Natural Gas factors	0.020 gr/dscf	Dust Coll.	99% PM	
20P	AP-42, Section 11.19.2-2	0.0915 lb PM/ton 0.0915 lb PM <sub>10</sub> /ton	None	n/a	
24P	AP-42, Section 11.19.2-2	0.0915 lb PM/ton 0.0915 lb PM <sub>10</sub> /ton	None	n/a	
26P	AP-42, Section 12.2.1 and 12.2.2	Factor based on usage	None	n/a	
29P	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	
30P	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	
33P	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	
34P	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	
35P	AP-42, Section 11.19.2-2	0.0338 lb PM/ton 0.0338 lb PM <sub>10</sub> /ton	None	n/a	



SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
36P	AP-42, Section 11.19.2-2	0.0159 lb PM/ton 0.00754 lb PM <sub>10</sub> /ton	None	n/a	

13. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
11Q	PM VOC CO	5 and 202 25A 10	Every 5 Years	Dept. Guidance
24Q	PM NO <sub>x</sub> VOC CO	5 and 202 7E 25A 10	Every 5 Years	PSD
30Q	PM NO <sub>x</sub> VOC CO	5 and 202 7E 25A 10	Every 5 Years	PSD

14. MONITORING OR CEMS

The permittee must monitor the following parameters with CEMS or other monitoring equipment (temperature, pressure differential, etc.)

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
11Q	Opacity	COM	Continuous	N
11Q	%O <sub>2</sub>	CEM	Continuous	N
24Q	Opacity	COM	Continuous	N
24Q	%O <sub>2</sub>	CEM	Continuous	N
30Q	Opacity	COM	Continuous	N
30Q	%O <sub>2</sub>	CEM	Continuous	N

## 15. RECORD KEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
01Q	Tons of Limestone	1,700,000 per 12 month period	Monthly	N
02Q	Tons of Limestone	1,640,000 per 12 month period	Monthly	N
03Q	Tons of Limestone	3,362,000 per 12 month period	Monthly	N
05Q	Number of Railcars	19,700 per 12 month period	Monthly	N
07Q	Tons of Limestone	23,448,000 per 12 month period	Monthly	N
09Q	Tons of Limestone	822,000 per 12 month period	Monthly	N
10Q	Tons of Limestone	900,000 per 12 month period	Monthly	N
11Q	Tons of Coal/Coke	47,254 per 12 month period	Daily	N
11Q	Tons of Lime	687.0 per day	Daily	Y
11Q	Ash Mineral Content	None Listed	Each New Mine	N
11Q	Particulate Emission Rate before 1/5/07	0.60 lb/ton of Stone Fed	Each Run	N
11Q	Particulate Emission Rate after 1/5/07	0.12 lb/ton of Stone Fed	Each Run	N
11Q	Sulfur Content of Fuel	4% by weight daily 3% by weight 30 day average	Daily	N
11Q	NO <sub>x</sub> emissions	3.5 lb/ton of Lime	Continuous %O <sub>2</sub>	N
12Q	Hours of Operations	1,460 per 12 month period	Monthly	N
17Q	Tons of Lime	456,250 per 12 month period	Monthly	N
19Q	Tons of Coal/Coke	94,502 per 12 month period	Monthly	N

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
22Q	Tons of Limestone	200,000 per 12 month period	Monthly	N
24Q	Tons of Coal/Coke	47,254 per 12 month period	Daily	N
24Q	Tons of Limestone	687.0 per day	Daily	Y Annual total
24Q	Ash Mineral Content	None Listed	Each New Mine	N
24Q	Particulate Emission Rate	0.015 gr/dscf	Annual	N
24Q	Particulate Emission Rate	0.10 lb/ton of Stone Fed	Each Run	N
24Q	Sulfur Content of Fuel	4% by weight daily 3% by weight 30 day average	Daily	N
24Q	NO <sub>x</sub> emissions	3.5 lb/ton of Lime	Continuous %O <sub>2</sub>	N
25Q	Particulate Emission Rate	0.015 gr/dscf	Annual	N
27Q	Tons of Limestone	450,000 per 12 month period	Monthly	N
27Q	Particulate Emission Rate	0.05 gr/dscf	Annual	N
28Q	Particulate Emission Rate	0.015 gr/dscf	Annual	N
30Q	Tons of Coal/Coke	47,254 per 12 month period	Daily	N
30Q	Tons of Limestone	687.0 per day	Daily	Y Annual total
30Q	Ash Mineral Content	None Listed	Each New Mine	N
30Q	Particulate Emission Rate	0.015 gr/dscf	Annual	N
30Q	Particulate Emission Rate	0.10 lb/ton of Stone Fed	Each Run	N
30Q	Sulfur Content of Fuel	4% by weight daily 3% by weight 30 day average	Daily	N
30Q	NO <sub>x</sub> Emissions	3.5 lb/ton of Lime	Continuous %O <sub>2</sub>	N

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
30Q	CO Emissions	3.0 lb/ton of Lime	Continuous %O <sub>2</sub>	N
31Q	Tons of Limestone	1,100,000 per 12 month period	Monthly	N
31Q	Particulate Emission Rate	0.015 gr/dscf	Annual	N
32Q	Particulate Emission Rate	0.015 gr/dscf	Annual	N
33Q	Particulate Emission Rate	0.015 gr/dscf	Annual	N
34Q	Particulate Emission Rate	0.015 gr/dscf	Annual	N
35Q	Tons of Limestone	450,000 per 12 month period	Monthly	N
35Q	Particulate Emission Rate	0.05 gr/dscf	Annual	N
36Q	Particulate Emission Rate	0.015 gr/dscf	Annual	N
37Q	Particulate Emission Rate	0.015 gr/dscf	Annual	N
38Q	Particulate Emission Rate	0.015 gr/dscf	Annual	N
39Q	Particulate Emission Rate	0.015 gr/dscf	Annual	N
01P	Tons of Limestone	432,000 per 12 month period	Monthly	N
14P	Tons of Bagged Hydrated Lime	70,080 per 12 month period	Monthly	N
20P	Tons of Pulverized Limestone	262,800 per 12 month period	Monthly	N
24P	Tons of Pulverized Limestone	35,040 per 12 month period	Monthly	N
35P	Particulate Emission Rate	0.05 gr/dscf	Annual	N
Gasoline Tank	RVP 6	20,000 gallons per 12 month period	Monthly	N

16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01Q	15%	NSPS OOO	Weekly Observations
02Q	15%	NSPS OOO	Weekly Observations
03Q	10%	NSPS OOO	Weekly Observations
04Q	20%	Dept. Guidance	Daily Observations
05Q	20%	Dept. Guidance	Daily Observations
07Q	10%	NSPS OOO MACT AAAAA	Weekly Observations
09Q	10%	NSPS OOO	Weekly Observations
10Q	10%	NSPS OOO	Weekly Observations
11Q	15%	NSPS HH MACT AAAAA	COM
12a&bQ	5%	Dept. Guidance	Weekly Observations
13Q	5%	CAM	Daily Observations
14Q	5%	Dept. Guidance	Weekly Observations
15Q	5%	CAM	Daily Observations
16Q	5%	Dept. Guidance	Weekly Observations
17Q	5%	Dept. Guidance	Weekly Observations
18Q	5%	Dept. Guidance	Weekly Observations
19Q	20%	Dept. Guidance	Daily Observations
20Q	20%	Dept. Guidance	Daily Observations
21Q	20%	Dept. Guidance	Daily Observations
22Q	20%	Dept. Guidance	Daily Observations
24Q	15%	NSPS HH MACT AAAAA	COM
25Q	5%	CAM	Weekly Observations
26Q	5%	Dept. Guidance	Weekly Observations
27Q	10%	MACT AAAAA	Weekly Observations
28Q	20%	Dept. Guidance	Daily Observations

SN	Opacity	Justification for limit	Compliance Mechanism
30Q	15%	NSPSHH MACT AAAAA	COM
31Q	20%	NSPS OOO	Daily
32Q	5%	CAM	Daily Observations
33Q	5%	Dept. Guidance	Weekly Observations
34Q	20%	Dept. Guidance	Daily Observations
35Q	10%	MACT AAAAA	Weekly
36Q	5%	Dept. Guidance	Weekly Observations
37Q	5%	Dept. Guidance	Weekly Observations
38Q	5%	Dept. Guidance	Weekly Observations
39Q	5%	Dept. Guidance	Weekly Observations
01P	10%	NSPS OOO	Weekly
12P	5%	CAM	Daily
13P	5%	Dept. Guidance	Weekly Observations
14P	5%	Dept. Guidance	Weekly Observations
18P	5%	CAM	Daily
19P	5%	CAM	Daily
20P	20%	Dept. Guidance	Daily Observations
24P	5%	Dept. Guidance	Weekly Observations
29P	5%	Dept. Guidance	Weekly Observations
30P	7%	NSPS OOO	Weekly Observations
33P	10%	NSPS OOO	Weekly Observations
34P	10%	NSPS OOO	Weekly Observations
35P	20%	Dept. Guidance	Daily Observations
36P	10%	NSPS OOO	Weekly Observations

17. DELETED CONDITIONS:

Former SC	Justification for removal
261-266	15P and 16P were removed. These conditions are no longer needed.

18. GROUP A INSIGNIFICANT ACTIVITIES

Source Name	Group A Category	Emissions (tpy)						
		PM PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs	
							Single	Total
Lime Cooler Rejects Discharge	A-13	0.06						
		0.06						
Dribble Chute Discharge	A-13	0.003						
		0.001						
Railcar Cleanout	A-13	0.821						
		0.821						
Blast Hole Drilling	A-13	0.08						
		0.168						
Quarry Blasting	A-13							
Portable Conveyor	A-13	0.159						
		0.075						
Big Bag Filling	A-13	0.18						
		0.18						
8,000 gallon Diesel Storage Tank	A-3			0.02				
1,000 gallon Diesel Storage Tank	A-3			0.01				
200 gallon Diesel Storage Tank	A-2			0.01				

17. VOIDED, SUPERCEDED, OR SUBSUMED PERMITS:

List all active permits voided/superceded/subsumed by the issuance of this permit.

Permit #
0045AOP-R3

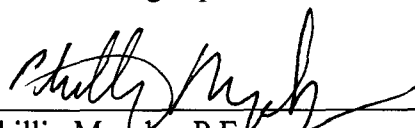
Permit #: 0045-AOP-R4

AFIN: 32-00014

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18. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.

  
\_\_\_\_\_  
Phillip Murphy, P.E.





01Q	Primary Crusher	PM	0.43	1.05	PM10	0.3	0.5
02Q	Secondary Crusher	PM	0.31	1.02	PM10	0.2	0.5
03Q	Triple Deck Screen	PM	1.06	2.97	PM10	0.5	1.5
04Q	Limestone Piles	PM	3.6	11.1	PM10	1.8	5.6
05Q	Railcar Loadout	PM	0.1	0.1	PM10	0.1	0.1
06Q	Unpaved Quarry Haul Roads	PM	39.1	40.6	PM10	11.1	11.6
07Q	Conveyor Transfer Points	PM	8.2	19.8	PM10	3.9	9.4
09Q	PLS/Ag-Lime Screen	PM	0.53	0.73	PM10	0.3	0.4
10Q	Kiln Feed Screen	PM	0.3	1.21	PM10	0.2	0.6
11Q	Rotary Kiln 1	PM	6.9	27.4	PM10	6.9	27.4
12aQ	Kiln-Dust Bin Vent Dust Collector	PM	0.3	0.2	PM10	0.3	0.2
13Q	#1 Lime Discharge	PM	0.3	1.2	PM10	0.3	1.2
14Q	Lime Product Silo Dust Collector	PM	0.2	0.9	PM10	0.2	0.9
15Q	Lime Screen/Storage Dust Collector	PM	1.8	7.9	PM10	1.8	7.9
16Q	Lime Loadout Dust Collector	PM	0.2	0.8	PM10	0.2	0.8
17Q	Off-Spec Lime Loadout/Bin Vent	PM	0.2	0.5	PM10	0.2	0.5
18Q	Lime Loadout to Railcars	PM	0.2	0.8	PM10	0.2	0.8
19Q	Coal/Coke Rail Dump	PM	0.54	0.38	PM10	0.3	0.2
20a/bQ	Coal/Coke Storage Piles	PM	0.5	1.4	PM10	0.3	0.7
21Q	Coal/Coke Transfer Points	PM	0.1	0.3	PM10	0.1	0.2
22Q	Ag-Lime Loadout to Truck	PM	0.1	0.1	PM10	0.1	0.1
24Q	Rotary Kiln 2	PM	5.8	22.9	PM10	5.8	22.9
25Q	#2 Lime Discharge	PM	0.3	1.2	PM10	0.3	1.2
26Q	#1 and #2 Coal/Coke Transfer Points Bin Vents	PM	0.3	1.2	PM10	0.3	1.2
27Q	Kiln Feed Belt into #2 Kiln Surge Bin	PM	1.1	0.1	PM10	0.1	0.1
28Q	#1 and #2 Coal/Coke Transfer Points	PM	0.1	0.1	PM10	0.1	0.1
29Q	Paved Quarry/Kiln Area Roads	PM	0.58	0.43	PM10	0.2	0.1
30Q	Rotary Lime Kiln 3	PM	5.8	22.9	PM10	5.8	22.9
31Q	Transfer Points to Extended RKFS Pile	PM	0.9	1.6	PM10	0.5	0.8
32Q	#3 Lime Discharge (Nuisance Dust Collector)	PM	0.3	1.2	PM10	0.3	1.2
33Q	#3 Coal/Coke Bin Vent	PM	0.2	0.6	PM10	0.2	0.6
34Q	#3 Coal/Coke Transfer Point	PM	0.1	0.1	PM10	0.1	0.1
35Q	Kiln Feed Belt into #3 Kiln Surge Bin	PM	0.1	0.1	PM10	0.1	0.1
36Q	Lime Storage Silo Dust Collector	PM	0.9	4	PM10	0.9	4

37Q	Lime Storage Silo Dust Collector	PM	0.9	4	PM10	0.9	4
38Q	Lime Loadout Dust Collector	PM	0.2	0.8	PM10	0.2	0.8
39Q	Lime Loadout Dust Collector	PM	0.2	0.8	PM10	0.2	0.8
40Q	LKD Truck Loading	PM	0.4	0.6	PM10	0.2	0.3
41Q	LKD Truck Dumping	PM	0.4	0.6	PM10	0.2	0.3
01P	Limestone Drop Points	PM	0.53	1.35	PM10	0.3	0.7
12P	Hydrate Separator System Dust Collector	PM	1.9	8.2	PM10	1.9	8.2
13P	Hydrate Storage Tank Loadout	PM	0.3	1	PM10	0.3	1
14P	Hydrated Lime Bagging Operations	PM	0.8	3.3	PM10	0.8	3.3
18P	Stone and Roller Mill Plant #1	PM	2.7	11.5	PM10	2.7	11.5
19P	Stone and Roller Mill Plant #2	PM	1.8	7.8	PM10	1.8	7.8
20P	PLS Screening Operations	PM	0.67	2.94	PM10	0.4	1.4
24P	PLS Bagging Operations	PM	0.4	1.7	PM10	0.4	1.7
26P	Paved PLS/Lime Plant Roads	PM	1.6	1.2	PM10	0.4	0.3
29P	Hydrate Storage Dust Collector	PM	0.2	0.8	PM10	0.2	0.8
30P	Consolidated PLS Loadout Bin Vent	PM	0.4	1.5	PM10	0.4	1.5
33P	Consolidated PLS 140 Railcar Drop-Out	PM	0.2	0.8	PM10	0.2	0.8
34P	Consolidated PLS 270 Railcar Drop-Out	PM	0.2	0.8	PM10	0.2	0.8
35P	Quicklime Fines Rail Unloading Pit	PM	0.4	1.7	PM10	0.4	1.7
36P	Modified PLS Products Loading Station	PM	0.2	0.8	PM10	0.2	0.8
		PM	95.85	229.08			
		PM10	56.3	174.9			