STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0045-AOP-R8 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:

Bart Patton

4. NAICS DESCRIPTION AND CODE:

NAICS Description:Lime ManufacturingNAICS Code:327410

5. ALL SUBMITTALS:

The following is a list of ALL permit applications included in this permit revision.

Date of Application	Type of Application (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
7/26/2018	Minor Mod	Remove SN-02Qa and replace with SN- 02Qb; Add SN-03Qb, 03Qc, 47Qa, and 47Qb; update throughput limits at SN-01Q and 03Qa; add emissions at SN-04Q, 06Q, and 07Q
		511 012, 002, and 012

6. **REVIEWER'S NOTES**:

Arkansas Lime Company owns and operates a limestone quarry and lime manufacturing plant near Batesville, in Independence County, Arkansas. The following changes are included in this minor modification to the Title V permit:

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- Remove SN-02Qa Secondary Crusher and replace with SN-02Qb Secondary Crusher
- Re-identify SN-03Q Triple Deck Screen as SN-03Qa Triple Deck Screen
- Add SN-03Qb Scalp Screen, SN-03Qc Scalp Screen, and SN-03Qd Screen
- Add storage piles as part of SN-04Q Storage Piles
- Add mileage as part of SN-06Q Unpaved Quarry Haul Roads
- Add conveyors and transfer points as part of existing SN-07Q Conveyor Transfer Points
- Add SN-47Q Storage Bins for the sorting machine buildings
- Add Sorting Machines to the Insignificant Activity List (category N/A for this source of no emissions)
- Update throughput limits for SN-01Q Primary Crusher and SN-03Qa Triple Deck Screen due to changes in material composition and process routing
- Clarify tables within Specific Conditions by adding a column for Source Number where it had not consistently been included

Permitted annual emissions increased as follows: 2.3 tpy PM_{10} , Permitted annual emissions decreased as follows: 1.3 tpy PM.

The Sorter Bins added at this revision are numbered #1, #2 and #5. According to the project flow diagram submitted as part of the April 2018 minor mod application, Sorter Bin #1 serves Sorter Machines #3 and #4, Sorter Bin #2 serves Sorter #1 and #2, and Sorter Bin #5 serves Sorter #5. In an earlier application, other sorter bins were added, but based on the latest application, these are the only sorter bins being installed at this time.

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 has no active or pending enforcement actions. The facility was last inspected on April 25, 2018.

8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N If yes, were GHG emission increases significant? N/A

- b) Is the facility categorized as a major source for PSD? Y
- Single pollutant \geq 100 tpy and on the list of 28 or single pollutant \geq 250 tpy and not on list

If yes for 8(b), explain why this permit modification is not PSD.

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

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Category	PSD Step 1 Emissions Increase PM (tpy)	PSD Step 1 Emissions Increase PM ₁₀ (tpy)	PSD Step 1 Emissions Increase PM _{2.5} (tpy)
New & Retiring Equipment	12.319	4.675	0.669
New & Retiring Equipment	6.051	1.788	0.189
Total Project Increases	18.4	6.5	0.9
PSD Significant Emission Rate (SER)	25	15	10

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)	
01Q, 02Q, 03Q, 07Q, 09Q, 10Q, 27Q, 31Q, 35Q, 36Q, 46Q, 47Q, 01P, 19P, 30P, 33P, 34P, and 36P	PM and PM_{10}	40 CFR 60, Subpart OOO New Source Performance Standards for Non Metallic Mineral Processing Plants	
11Q, 24Q, and 30Q	PM and PM_{10}	40 CFR 60, Subpart HH New Source Performance Standards for Lime Manufacturing Plants	
21Q, 28Q, and Coal systems	PM and PM_{10}	40 CFR 60, Subpart Y New Source Performance Standards for Coal Preparation Plants	
07Q, 11Q, 24Q, 27Q, 30Q, and 35Q	PM and PM_{10}	40 CFR 63, Subpart AAAAA National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants	
SN-43Q	N/A	40 CFR Part 63 subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	
11Q, 24Q, 25Q, 26Q, 27Q, 28Q, 30Q through 39Q	$PM, PM_{10}, SO_2, CO, NO_x$	40 CFR 52 Prevention of Significant Deterioration	
11Q, 13Q, 15Q, 24Q, 25Q, 32Q, 12P, 18P, and 19P	PM and PM_{10}	40 CFR 64 Compliance Assurance Monitoring	

10. PERMIT SHIELD – TITLE V PERMITS ONLY:

Did the facility request a permit shield in this application? N (Permit Shield in the permit remains unchanged from R7)

If yes, are applicable requirements included and specifically identified in the permit? N/A

11. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

12. AMBIENT AIR EVALUATIONS:

The following are results for ambient air evaluations or modeling.

a) NAAQS

A NAAQS evaluation is not required under the Arkansas State Implementation Plan, National Ambient Air Quality Standards, Infrastructure SIPs and NAAQS SIP per Ark. Code Ann. § 8-4-318, dated March 2017 and the ADEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

The non-criteria pollutants listed below were evaluated. Based on Department procedures for review of non-criteria pollutants, emissions of all other non-criteria pollutants are below thresholds of concern.

1st 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 (mg/m³), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m ³)	$PAER (lb/hr) = 0.11 \times TLV$	Proposed lb/hr	Pass?
Acrolein	0.229	2.52E-02	2.27E-04	Y
Arsenic	0.041	4.51E-03	3.05E-06	Y

Non-criteria pollutants were unchanged at R8.

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Pollutant	TLV (mg/m ³)	$PAER (lb/hr) = 0.11 \times TLV$	Proposed lb/hr	Pass?
Beryllium	0.5E-04	5.5E-06	1.83E-07	Y
Cadmium	0.01	1.1E-03	1.68E-05	Y
Chromium	0.01	1.1E-03	2.14E-05	Y
Cobalt	0.02	2.2E-03	1.28E-06	Y
Manganese	0.02	2.2E-03	5.8E-06	Y
Mercury	0.025	2.75E-03	3.97E-06	Y
Nickel	0.2	0.022	3.2E-05	Y
Selenium	0.2	0.022	3.66E-07	Y

c) No other modeling was required.

13. 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	0.00120 lb PM/ton 0.00054 lb PM ₁₀ /ton	None	n/a	
02Q	AP-42, Section 11.19.2	0.00120 lb PM/ton 0.00054 lb PM ₁₀ /ton	None	n/a	
03Q	AP-42, Section 11.19.2	0.00220 lb PM/ton 0.00074 lb PM ₁₀ /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	0.00030 lb PM/ton 0.00010 lb PM ₁₀ /ton	None	n/a	
06Q	AP-42 Emission factor equation for unpaved roads, Table 13.2.2-1, Figure 13.2.2-1 and Figure 13.2.2-2	Factors based on usage and location	None	n/a	
07Q	AP-42, Section 11.19.2-2 and AP-42 Section 13.2.4	Numerous Factors	Enclosure on D06 Kiln Feed Belt	85% PM on D06	

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SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
09Q	AP-42, Section 11.19.2	0.00220 lb PM/ton 0.00074 lb PM ₁₀ /ton	None	n/a	
10Q	AP-42, Section 11.19.2	0.00220 lb PM/ton 0.00074 lb PM ₁₀ /ton	None	n/a	
	$PM/PM_{10}MACT$ $PM_{10}Condensables$ AP-42, Table 11.17-2	0.12 lb/tsf 0.38 lb/ton	Dust Coll.	99% PM	
11Q	SO ₂ Mass balance	3% by weight (long term) and 4% by weight (short term)	Dry Scrub	95% SO ₂	
	VOC AP-42 CO BACT levels NO _X BACT levels	0.6 lb/ton 3.0 lb/ton produced 3.5 lb/ton produced			
12Qa	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	2000 dscfm
12Qb	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	1500 dscfm
13Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	3000 dscfm
14Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	1500 dscfm
15Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	14000 dscfm
16Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	1400 dscfm
17Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	1400 dscfm
18Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	1400 dscfm
19Q	AP-42 Section 13.2.4	0.00136 lb PM/ton 0.000642 lb PM ₁₀ /ton	None	n/a	
20Qa/b	EPA's Control of Open Fugitive Dust Sources	See Document	None	n/a	
21Q	AP-42 Section 13.2.4	0.00136 lb PM/ton 0.000642 lb PM ₁₀ /ton	None	n/a	
22Q	AP-42, Section 11.19.2-2	0.00030 lb PM/ton 0.0001 lb PM ₁₀ /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
	$\frac{PM/PM_{10} MACT}{PM_{10} Condensables}$ $AP-42, Table 11.17-2$	0.10 lb/tsf 0.38 lb/ton	Dust Coll.	99% PM	
24Q	SO ₂ Mass balance	3% by weight (long term) and 4% by weight (short term)	Dry Scrub	95% SO ₂	
	VOC AP-42 CO BACT levels NO _X BACT levels	0.6 lb/ton 3.0 lb/ton produced 3.5 lb/ton produced			
25Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	3000 dscfm
26Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	2000 dscfm
27Q	AP-42 Section 13.2.4	0.00309 lb PM/ton 0.00146 lb PM ₁₀ /ton	Enclosure	85% PM	
28Q	AP-42 Section 13.2.4	0.00136 lb PM/ton 0.000641 lb PM ₁₀ /ton	Enclosure	85% PM	
29Q AP-42 Emission factor equation for paved roads, Table 13.2.2-1, Figure 13.2.2-1 and Figure		Factors based on usage and location	None	n/a	
	$\frac{PM/PM_{10}MACT}{PM_{10}Condensables}$ $AP-42, Table 11.17-2$	0.10 lb/tsf 0.38 lb/ton	Dust Coll.	99% PM	
30Q	SO ₂ Mass balance	3% by weight (long term) and 4% by weight (short term)	Dry Scrub	95% SO ₂	
	VOC AP-42 CO BACT levels NO _X BACT levels	0.6 lb/ton 3.0 lb/ton produced 3.5 lb/ton produced			
31Q	AP-42, Section 11.19.2-2 and AP-42 Section 13.2.4	0.000140 lb PM/ton 0.000046 lb PM ₁₀ /ton and 0.00309 lb PM/ton 0.00146 lb PM ₁₀ /ton	None	n/a	

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SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
32Q	Grain Loading	0.010 gr/dscf	Dust Coll.	99% PM	3000 dscfm
33Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	1000 dscfm
34Q	AP-42 Section 13.2.4	0.00136 lb PM/ton 0.000641 lb PM ₁₀ /ton	Enclosure	85% PM	
35Q	AP-42, Section 11.19.2-2	0.00309 lb PM/ton 0.00146 lb PM ₁₀ /ton	Enclosure	85% PM	
36Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	7000 dscfm
37Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	7000 dscfm
38Q	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	1400 dscfm
39Q	Grain Loading	0.015 gr/dscf	0.015 gr/dscf Dust Coll.		1400 dscfm
40Q	AP-42 Section 13.2.4	0.0776 lb PM/ton 0.00367 lb PM ₁₀ /ton	None	n/a	
41Q	AP-42 Section 13.2.4	0.0776 lb PM/ton 0.00367 lb PM ₁₀ /ton None		n/a	
43Q	Vendor specs, with HAP from AP-42 Table 3.3-2	Numerous Factors	None	n/a	
46Q	AP-42, Section 11.19.2 Table 11.19.2-2	lb/ton: Screening 0.0022 PM 0.00074 PM ₁₀ 5E-05 PM _{2.5} Conveyor transfer points 1.4E-04 PM 4.6E-05 PM ₁₀ 1.3E-05 PM _{2.5}	Water spray as needed	n/a	
47Q	AP-42, Section 11.19.2-2	1.4E-04 PM 4.6E-05 PM ₁₀ 1.3E-05 PM _{2.5}	None	n/a	
01P	AP-42, Section 11.19.2-2 and AP-42 Section 13.2.4	Numerous Factors	Partial Enclosure for B	85% PM for B	

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SN	Emission Factor Source (AP-42, testing, etc.)	Emission FactorControl(lb/ton, lb/hr, etc.)Equipment		Control Equipment Efficiency	Comments
<u> </u>		0.020 gr/dscf	Dust Coll.	99% PM	10730 dscfm
12P	Grain Loading and Natural Gas factors	100 lb/MMscf NO _X 84 lb/MMscf CO 5.5 lb/MMscf VOC 0.6 lb/MMscf SO ₂			
13P	Grain Loading	0.020 gr/dscf Dust Coll.		99% PM	1200 dscfm
14P	AP-42, Table 11.17- 4	0.0915 lb PM/ton 0.0305 lb PM ₁₀ /ton	None	n/a	
		0.020 gr/dscf	Dust Coll.	99% PM	15000 dscfm
18P	Grain Loading and Natural Gas factors	100 lb/MMscf NO _X 84 lb/MMscf CO 5.5 lb/MMscf VOC 0.6 lb/MMscf SO ₂			
		0.020 gr/dscf	Dust Coll.	99% PM	10100 dscfm
19P	Grain Loading and Natural Gas factors	100 lb/MMscf NO _X 84 lb/MMscf CO 5.5 lb/MMscf VOC 0.6 lb/MMscf SO ₂			
20P	AP-42, Section 11.19.2-2	0.04500 lb PM/ton 0.01080 lb PM ₁₀ /ton	None	n/a	
24P	AP-42, Table 11.17- 4	0.0915 lb PM/ton 0.0305 lb PM ₁₀ /ton	None	n/a	
26P	AP-42 Emission factor equation for paved roads, Table 13.2.2-1, Figure 13.2.2-1 and Figure 13.2.2-2	Factors based on usage and location	None	n/a	
29P	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	1200 dscfm
30P	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	2500 dscfm
33P	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	1200 dscfm
34P	Grain Loading	0.015 gr/dscf	Dust Coll.	99% PM	1200 dscfm
35P	AP-42, Table 11.17- 4	0.0225 lb PM/ton 0.0750 lb PM ₁₀ /ton	None	n/a	
36P	Grain Loading	0.022 gr/dscf	Dust Coll.	99% PM	900 dscfm

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14. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
11Q	PM NO _X CO stone feed rate monitor	5 7E 10 Mass throughput test	Every 5 Years	Dept. Guidance
24Q	PM NO _X CO stone feed rate monitor	5 7E 10 Mass throughput test	Every 5 Years	PSD
30Q	PM NO _X CO stone feed rate monitor	5 7E 10 Mass throughput test	Every 5 Years	PSD
46Q	Opacity	9	Initial test	NSPS Subpart OOO

15. 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	СОМ	Continuous	Only periods of excess: See SC #58
11Q	%O ₂	CEM	Continuous	Ν

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
24Q	Opacity	СОМ	Continuous	Only periods of excess: See SC#125
24Q	%O ₂	CEM	Continuous	Ν
30Q	Opacity	СОМ	Continuous	Only periods of excess: See SC #177
30Q	%O ₂	CEM	Continuous	Ν

16. RECORDKEEPING 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	1,251,200 per 12 month period	Monthly	Ν
02Qb	Tons of Limestone	1,746,468 per 12 month period	Monthly	Ν
03Qa	Tons of Limestone	3,701,467 per 12 month period	Monthly	Ν
03Qb	Tons of Limestone	1,955,000 per 12 month period	Monthly	Ν
03Qc	Tons of Limestone	1,500,040 per 12 month period	Monthly	N
05Q	Number of Railcars	16,000 per 12 month period	Monthly	Ν
09Q	Tons of Limestone	822,000 per 12 month period	Monthly	Ν
10Q	Tons of Limestone	1,368,750 per 12 month period	Monthly	Ν
11Q	Tons of Coal/Coke	47,253 per 12 month period	Daily	N
11Q	Tons of Lime	687.0 per day, 228,125 per 12 month period	Daily	Y (Annual Total)

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
11Q	Ash Mineral Content	Maximum allowable to keep HAPs below Deminimis levels	Each New Mine	Ν
11Q	Particulate Emission Rate	0.12 lb/ton of Stone Fed	Each Run	Ν
11Q	Sulfur Content of Fuel	4% by weight daily 3% by weight 30 day average	Each Shipment	Ν
11Q	NO _X emissions	3.5 lb/ton of Lime	Continuous %O ₂	Ν
11Q	Performance Test Data	See SC#57 and SC#65 (h),(i)	5 years	Y
11Q	Inspection of Filter	N/A	Annually	Ν
11Q	Calibration of O ₂ monitor	N/A	4 weeks and during cell replacement	Ν
19Q	Tons of Coal/Coke	141,759 per 12 month period	Monthly	Ν
22Q	Tons of Limestone	200,000 per 12 month period	Monthly	Ν
24Q	Tons of Coal/Coke	47,253 per 12 month period	Daily	Ν
24Q	Tons of Limestone	687.0 per day 228,125 per 12 month period	Daily	Y (Annual total)
24Q	Ash Mineral Content	Maximum allowable to keep HAPs below Deminimis levels	Each New Mine	Ν
24Q	Particulate Emission Rate	0.10 lb/ton of Stone Fed	Each Run	Ν
24Q	Sulfur Content of Fuel	4% by weight daily 3% by weight 30 day average	Each Shipment	N
24Q	NO _X emissions	3.5 lb/ton of Lime	Continuous %O ₂	N
24Q	Performance Test Data	See SC#132 and SC#144 (h),(i)	5 years	Y
24Q	Inspection of Filter	N/A	Annually	Ν
24Q	Calibration of O ₂ monitor	N/A	4 weeks and during cell replacement	N

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
25Q	Cause of any visible emission exceedance and Corrective Action	5%	Daily	Ν
30Q	Tons of Coal/Coke	47,253 per 12 month period	Daily	N
30Q	Tons of Limestone	687.0 per day 228,125 per 12 month period	Daily	Y (Annual total)
30Q	Ash Mineral Content	Maximum allowable to keep HAPs below Deminimis levels	Each New Mine	Ν
30Q	Particulate Emission Rate after 1/5/07	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	Each Shipment	Ν
30Q	NO _X emissions	3.5 lb/ton of Lime	Continuous %O ₂	Ν
30Q	Performance Test Data	See SC#189 and SC#201 (h),(i)	5 years	Y
30Q	Inspection of Filter	N/A	Annually	Ν
30Q	Calibration of O ₂ monitor	N/A	4 weeks and during cell replacement	Ν
31Q	Tons of Limestone	1,100,000 per 12 month period	Monthly	Ν
32Q	Particulate Emission Rate	0.010 gr/dscf	Annual	Ν
33Q	Particulate Emission Rate	0.015 gr/dscf	Annual	Ν
35Q	Tons of Limestone	450,000 per 12 month period	Monthly	Ν
36Q	Particulate Emission Rate	0.015 gr/dscf	Annual	Ν
37Q	Particulate Emission Rate	0.015 gr/dscf	Annual	Ν
38Q	Particulate Emission Rate	0.015 gr/dscf	Annual	Ν
39Q	Particulate Emission Rate	0.015 gr/dscf	Annual	Ν

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
		500 hr/yr total		
43Q	Hours of Operation and Description of Use	100 hr/yr maintenance	Each use	N
		50 hr/yr non-emergency		
43Q	Maintenance Performed	See SC#249, 250, 253, and 254	As Needed	N
47Qa	Tons of Limestone	1,672,611 per 12 month period	Monthly	N
47Qb	Tons of Limestone	250,892 per 12 month period	Monthly	N
01P	Tons of Limestone	432,000 per 12 month period	Monthly	N
14P	Tons of Bagged Hydrated Lime	35,040 per 12 month period	Monthly	N
20P	Tons of Pulverized Limestone	262,800 per 12 month period	Monthly	Ν
24P	Tons of Pulverized Limestone	35,040 per 12 month period	Monthly	Ν

17. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01Q	15%	NSPS OOO	Weekly Observations
02Qb	12%	NSPS OOO Weekly Obser	
03Qa	10%	NSPS OOO	Weekly Observations
03Qb	7%	NSPS OOO	Weekly Observations
03Qc	7%	NSPS OOO	Weekly Observations
05Q	20%	Dept. Guidance	Daily Observations
07Q	7%	NSPS OOO MACT AAAAA	Weekly Observations
09Q	10%	NSPS OOO	Weekly Observations
10Q	10%	NSPS OOO Weekly Observation	

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SN	Opacity	Justification for limit Compliance Mechanism		
11Q	15%	NSPS HH MACT AAAAA	СОМ	
12Q(a&b)	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	Weekly Observations	
20Q	20%	Dept. Guidance	Weekly Observations	
21Q	20%	Dept. Guidance	Weekly Observations	
22Q	20%	Dept. Guidance	Weekly Observations	
24Q	15%	NSPS HH MACT AAAAA	СОМ	
25Q	5%	CAM	Daily Observations	
26Q	5%	Dept. Guidance	Weekly Observations	
27Q	10%	MACT AAAAA	Weekly Observations	
28Q	20%	Dept. Guidance	Weekly Observations	
30Q	15%	NSPSHH MACT AAAAA	СОМ	
31Q	20%	NSPS OOO	Weekly Observations	
32Q	5%	CAM	Daily Observations	
33Q	5%	Dept. Guidance Weekly Observation		
34Q	20%	Dept. Guidance Weekly Observation		
35Q	10%	MACT AAAAA Weekly Observation		
36Q	5%	Dept. Guidance	Weekly Observations	
37Q	5%	Dept. Guidance	Weekly Observations	
38Q	5%	Dept. Guidance Weekly Observations		

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SN	Opacity	Justification for limit Compliance Mechanism		
39Q	5%	Dept. Guidance	Weekly Observations	
43Q	20%	Dept. Guidance Daily when open		
46Q	7%	NSPS OOO	Weekly Observations	
47Qa	7%	NSPS OOO	Weekly Observations	
47Qb	7%	NSPS OOO	Weekly Observations	
01P	10%	NSPS OOO	Weekly Observations	
12P	5%	САМ	Daily	
13P	5%	Dept. Guidance	Weekly Observations	
14P	5%	Dept. Guidance	Weekly Observations	
18P	5%	САМ	Daily	
19P	5%	CAM	Daily	
20P	20%	Dept. Guidance Weekly Obser		
24P	5%	Dept. Guidance	Weekly Observations	
29P	5%	Dept. Guidance Weekly Observ		
30P	7%	NSPS OOO Weekly Obser		
33P	10%	NSPS OOO	Weekly Observations	
34P	10%	NSPS OOO Weekly Observation		
35P	20%	Dept. Guidance	Weekly Observations	
36P	7%	NSPS OOO Weekly Observation		

18. DELETED CONDITIONS:

Former SC	Justification for removal
247-258	The old requirements under NESHAP ZZZZ did not apply to the new engine

19. GROUP A INSIGNIFICANT ACTIVITIES:

	Group A	Emissions (tpy)						
Source Name	Category	PM	SO	VOC	CO	NO	HA	Ps
		PM ₁₀	502	voc	0	NO _X	Single	Total
Lime Cooler Rejects	A-13	0.06						
Discharge		0.06						
Dribble Chute	A-13	0.01						
Discharge		0.01						
Railcar Cleanout	A-13	0.821						
	_	0.821						
Blast Hole Drilling	A-13	0.08						
		0.08						
Quarry Blasting	A-13	<5tpy						
		<5tpy						
Portable Conveyor	A-13	0.19						
-		0.09						
Big Bag Filling	Δ-13	0.4						
Dig Dag i ming	11 15	0.4						
8,000 gallon Diesel				0.01				
Storage Tank	A-3			0.01				
1,000 gallon Diesel	A 2			0.01				
Storage Tank	A-3			0.01				
2 X 500 gallon								
Diesel Storage	A-3			0.01				
Tanks								
1,000 gallon	A-3			04				
Gasoline Tank	11.5			0.1				
2 X 1,000 gallon								
Lube Oil Storage	A-3			0.1				
Tanks								
Hydrate Rejects	A-13	0.01						
Discharge								
Sione Bagging Dust								
back inside	N/A							
building)								
Hydrate Rejects Discharge Stone Bagging Dust Collector (vents back inside building)	A-13 N/A	0.01						

The following is a list of Insignificant Activities including revisions by this permit.

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	Group A	Emissions (tpy)						
Source Name	Category	PM	50.	VOC	CO	NO	HA	Ps
	0,	PM_{10}	\mathbf{SO}_2	VUC	CO	NO _x	Single	Total
Portable Water								
Pumps Engines and								
Trommel Screen								
Engine (non-	N/A							
stationary engines								
not subject to NSPS								
or NESHAP rules)								
Sorting Machines	N/A							
(no emissions)	1N/A							

20. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

The following is a list of all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
0045-AOP-R7

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Facility Name: Arkansas Lime Company Permit Number: 0045-AOP-R8 AFIN: 32-00014-R8

\$/ton factor Permit Type	23.93 Minor Mod	Annual Chargeable Emissions (tpy) Permit Fee \$	<u>2097.14</u> 500
Minor Modification Fee \$	500		
Minimum Modification Fee \$	1000		
Renewal with Minor Modification \$	500		
Check if Facility Holds an Active Minor Source or Minor Source General Permit			
If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$	0		
Total Permit Fee Chargeable Emissions (tpy) Initial Title V Permit Fee Chargeable Emissions (tpy)	-8.9		

HAPs not included in VOC or PM:

Chlorine, Hydrazine, HCl, HF, Methyl Chloroform, Methylene Chloride, Phosphine, Tetrachloroethylene, Titanium Tetrachloride

Air Contaminants:

All air contaminants are chargeable unless they are included in other totals (e.g., H2SO4 in condensible PM, H2S in TRS, etc.)

Revised 03-11-16

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
РМ		323.2	327.2	4	-0.4	327.2
PM ₁₀		327.6	327	-0.6		
PM _{2.5}			0	0		
SO ₂		426	425.5	-0.5	-0.5	425.5
VOC		43.8	43.2	-0.6	-0.6	43.2
со		1034.1	1032.5	-1.6		
NO _X		1213	1205.6	-7.4	-7.4	1205.6
HCl	\checkmark	95.64	95.64	0	0	95.64

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Total HAPs		0.16	0.16	0		