

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0620-AR-14 AFIN: 33-00002

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Unimin Corporation - Guion Facility
Main Street
Guion, Arkansas 72540

3. PERMIT WRITER:

Shawn Hutchings

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Industrial Sand Mining
NAICS Code: 212322

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
5/25/2018	Deminimis	3new conveyors

6. REVIEWER'S NOTES:

Unimin Corporation owns and operates a silica sand mine and processing plant in Guion (Izard County). The deminimis modification is a permit to add a new belt conveyor BC-12 and new bucket elevator BE-10 which will adjacent to existing BE-01. All are controlled by the same baghouse and are part of source SN-43. BE-01 will be used as a back up to the new BE-10. BE-10 and BC-12 will be subject to NSPS Subpart OOO. Also in this permit, two new screw conveyors (SC-501 and 502) are added as part of SN-52. These conveyors will allow the facility

to bypass product bin storage and move product directly toward loadout. Permitted emissions increased 0.4 tpy of PM and 0.2 tpy of PM₁₀.

7. COMPLIANCE STATUS:

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

There are no known enforcement actions against the facility

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

b) Is the facility categorized as a major source for PSD? N

- *Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list*

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

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
Sand Plant	PM/PM ₁₀	NSPS Subpart OOO
SN-58	NO _x , CO, VOC, HAP	40 CFR 60, Subpart JJJJ 40 CFR 63, Subpart ZZZZ

10. PERMIT SHIELD – TITLE V PERMITS ONLY:

Did the facility request a permit shield in this application? N

(Note - permit shields are not allowed to be added, but existing ones can remain, for minor modification applications or any Regulation 18 requirement.)

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.

- 1) 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.

2) Non-Criteria Pollutants:

Based on Department procedures for review of non-criteria pollutants, emissions of non-criteria pollutants are below thresholds of concern.

a) H₂S Modeling:

Not emitted by facility.

13. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
56	AP-42 natural gas and mass balance @ 96% conversion at RTO	Varied	RTO	96%	
70	Drop Point Equation AP-42	Equation	None		
43	NSPS Limit	0.014 gr/dscf	Baghouse	99%	
52	AP-42				

14. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
SN-43	PM	5	Initial	NSPS

15. MONITORING OR CEMS:

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

No monitoring was added.

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)
56	VOC/HAP usage	Specific Condition 39	Monthly	N
Plant wide throughput Specific Condition 7	Sand processed Resin processed Chemical additives	Not specified in confidential application	Monthly	N
Portable crusher throughput 35, 36, 37, 38, 39	Tons processed	Not specified in confidential application	Monthly	N
40	Diesel used	Not specified in confidential application	Monthly	N
Facility	OOO Records	None	As needed	N
Facility	ZZZZ Records	None	As needed	N

17. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01	10 - Dryer and Scrubber	Department Guidance	Proper Equipment operation and inspector to verify upon inspection.
02	10	Department Guidance	Proper Equipment operation and inspector to verify upon inspection
02A	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
03	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
04	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
05	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection

SN	Opacity	Justification for limit	Compliance Mechanism
06	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
07	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
08	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
10	20	Department Guidance	Proper Equipment operation and inspector to verify upon inspection
12	20	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
13	20	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
14	20	Department Guidance	Proper Equipment operation and inspector to verify upon inspection
15	20	Department Guidance	Proper Equipment operation and inspector to verify upon inspection
18	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
19	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection

SN	Opacity	Justification for limit	Compliance Mechanism
20	20	Department Guidance	Proper Equipment operation and inspector to verify upon inspection
21	20	Department Guidance	Proper Equipment operation and inspector to verify upon inspection
22	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
23	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
24	10	Department Guidance	Proper Equipment operation and inspector to verify upon inspection
25	20	Department Guidance	Proper Equipment operation and inspector to verify upon inspection
26	15	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
27	15	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
28	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
29	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection

SN	Opacity	Justification for limit	Compliance Mechanism
32	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
33	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
34	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
35	20	Department Guidance	Proper Equipment operation and inspector to verify upon inspection
36	20	Department Guidance	Proper Equipment operation and inspector to verify upon inspection
37	20	Department Guidance	Proper Equipment operation and inspector to verify upon inspection
38	20	Department Guidance	Proper Equipment operation and inspector to verify upon inspection
39	20	Department Guidance	Proper Equipment operation and inspector to verify upon inspection
40	20	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
41	20	Department Guidance	Proper Equipment operation and inspector to verify upon inspection

SN	Opacity	Justification for limit	Compliance Mechanism
42	20	Department Guidance	Proper Equipment operation and inspector to verify upon inspection
43	7	NSPS Limit	Quarterly OOO inspections.
44	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
45	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
46	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
47	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
48	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
49	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
52	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
53	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
54	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection

SN	Opacity	Justification for limit	Compliance Mechanism
55	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
56	5	Department Guidance	Proper Equipment operation and inspector to verify upon inspection
57	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
58	5	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
59	0	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
66	12	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
67	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
68	12	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
69	10	NSPS Limit	Proper Equipment operation and inspector to verify upon inspection
70	20	Department Guidance	Proper Equipment operation and inspector to verify upon inspection

18. DELETED CONDITIONS:

Former SC	Justification for removal
There were no removed conditions.	

19. GROUP A INSIGNIFICANT ACTIVITIES:

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

There were no changes to the insignificant activities.

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 #
0620-AR-13

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Pollutant (tpy)	Old Permit	New Permit	Change
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
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