

ADEQ MINOR SOURCE AIR PERMIT


Permit No. : 0620-AR-7

IS ISSUED TO:

Unimin Corporation
Main Street
Guion, AR 72540
Izard County
AFIN: 33-00002

THIS PERMIT IS THE ABOVE REFERENCED PERMITTEE'S AUTHORITY TO CONSTRUCT, MODIFY, OPERATE, AND/OR MAINTAIN THE EQUIPMENT AND/OR FACILITY IN THE MANNER AS SET FORTH IN THE DEPARTMENT'S MINOR SOURCE AIR PERMIT AND THE APPLICATION. THIS PERMIT IS ISSUED PURSUANT TO THE PROVISIONS OF THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT (ARK. CODE ANN. SEC. 8-4-101 *ET SEQ.*) AND THE REGULATIONS PROMULGATED THEREUNDER, AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:


Mike Bates
Chief, Air Division

March 24, 2008

Date

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List of Acronyms and Abbreviations

A.C.A.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
CFR	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound Per Hour
No.	Number
NO _x	Nitrogen Oxide
PM	Particulate Matter
PM ₁₀	Particulate Matter Smaller Than Ten Microns
SO ₂	Sulfur Dioxide
tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

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Section I: FACILITY INFORMATION

PERMITTEE: Unimin Corporation
AFIN: 33-00002
PERMIT NUMBER: 0620-AR-7
FACILITY ADDRESS: Main Street
Guion, AR 72540
MAILING ADDRESS: P.O. Box 29
Guion, AR 72540-0029
COUNTY: Izard
CONTACT POSITION: Mike Maloney, Plant Manager
TELEPHONE NUMBER: 870-346-5301
REVIEWING ENGINEER: Parviz Mokhtari
UTM Zone: Zone 15
UTM North South (Y): 3975.65
UTM East West (X): 595.69

Section II: INTRODUCTION

Summary of Permit Activity

Unimin Corporation owns and operates a silica sand mine and processing plant in Guion (Izard County). This De minimis permit modification is being issued to allow Unimin to install a vibrating screen, five screw conveyors, a bin, and truck loadout. The emission will be vented to an existing Screen House Collection System with scrubber (SN-02). Additionally, Specific Condition 14 (initial performance test requirement for SN-35, 36, 37, 38, and 39) was removed because the equipment is not subject to 40 CFR 60 Subpart OOO. The permitted emission increases 1.4 tons per year (tpy) PM and 0.12 tpy of PM₁₀.

Process Description

Sandstone is mined using underground room and pillar and open pit mining methods. The broken sandstone is loaded into off-highway end dump haul trucks by a front-end loader and is hauled to the dump hopper (SN-12) or stockpiled. The sandstone is screened by the grizzly feeder screen (SN-19). Fine material is screened off prior to crushing and deposited on the discharge belt (SN-02A). The oversize material is gravity fed to the primary jaw crusher (SN-25). The oversized material is crushed and deposited onto the discharge belt (SN-02A) on top of the finer material. The material is transferred to the belt conveyor (SN-03) that conveys the material to the vibrating scalping screen (SN-22). The fine material is scalped off and deposited onto the discharge belt (SN-04). The oversize material is crushed in the crusher (SN-26) and is deposited onto the discharge belt (SN-29) and returned to SN-03. This material on SN-04 is conveyed to the raw sand silos (SN-15, SN-16), where it is stored in preparation for processing.

Material is discharged from the raw sand silos, via feeders (SN-20, SN-21), onto the raw sand silo discharge belt (SN-05) and is conveyed to the stationary screen (SN-09). The fine material is removed and deposited into a product sump. The coarse material empties into the enclosed vertical shaft impact (VSI) crusher (SN-27). The sand discharged from the VSI crusher is deposited into a vibrating screen (SN-24). The fine material is deposited in a product sump, while the oversize material is conveyed (SN-06) to the VSI system to be reprocessed.

The sand in the product sump is pumped through a flotation circuit that removes clay and fine sand. The clay and fine sand are routed to tailings. The washed sand is pumped to dewatering cyclones and is discharged onto damp stockpiles (SN-10) for moisture drainage. The damp sand (3 - 7% moisture) is moved with a front-end loader to the stockpile discharge belt (SN-07), via a hopper (SN-13), to a grizzle feeder (SN-33). The discharge from the grizzle feeder is to a surge bin (SN-34) via a belt conveyor (SN-32). The surge bin (SN-34) discharges to a belt conveyor (SN-08) and then is transferred to the dryer.

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The dryer feed belt (SN-08) transports the sand into the dryer building and discharges into a feed chute that feeds a natural gas-fired fluid bed dryer. After drying, the sand is discharged into a bucket elevator and is transferred to a covered mill run conveyor. Particulate emissions from the dryer and the bucket elevator are controlled by a wet scrubber (SN-01) with 99% removal efficiency. The products of combustion from the dryer are also vented through SN-01.

The sand is transported via the mill run conveyor to the screen house. Primary clean-up and secondary screening, as well as secondary rescreening is performed in the screen house in order to separate the sand. The grades are blended to produce final products that are loaded into railcars or trucks. Dust from the screen house and the truck loadout is controlled by the screen house wet scrubber (SN-02), which has 99% removal efficiency. The emissions from rail loadout are controlled by the dryer wet scrubber (SN-01).

Sand is transported to the bagging operation via railcar. The material is unloaded from the railcars via belt conveyors (SN-30 and SN-09) and transported to the holding bin (SN-16) via a bucket elevator (SN-11). Material is then bagged in 50, 100 - pound bags (SN-17) or bulk bags (SN-31).

Portable Crushing Process

Material is dumped by a front-end loader into a hopper (SN-35) that conveys the material to a crusher (SN-37) via a feeder (SN-36). The crushed material is discharged from the crusher to the stacking conveyor (SN-38) and then to the product stockpiles (SN-39). The portable crushing units are powered by a generator (SN-40).

Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective February 15, 1999
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective October 15, 2007
40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants

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The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

Total Allowable Emissions

TOTAL ALLOWABLE EMISSIONS		
Pollutant	Emission Rates	
	lb/hr	tpy
PM	28.8	102.6
PM ₁₀	10.2	28.5
SO ₂	0.7	1.5
VOC	0.7	1.4
CO	4.4	15.4
NO _x	12.7	39.0

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Section III: PERMIT HISTORY

Permit # 0620-A was issued to Silica Products, Incorporated on 4/18/80 in order to expand its operation and control sand particle emissions by utilizing a wet scrubber which has an efficiency greater than 99%.

Permit # 0620-AR-1 was issued to Unimin Corp. on 3/16/94 as a modification in order to update the previous permit. This permit allowed for continuous operation of the facility subject to regulation under the *Arkansas Air Pollution Control Code* and the *Arkansas State Implementation Plan for Air Pollution Control*.

Permit modification #0620-AR-2 dated 7/11/96 was issued to document equipment changes and/or additions at the beginning and at the end of the process line. The equipment changes are documented in a table. The new emission sources are a conveyor belt that will recycle oversized material (SN-18) and a feeder discharge belt (SN-02A). Permitted emissions will be reduced.

Permit modification # 0620-AR-3 dated 4/24/97 was issued to quantify PM₁₀ emissions less than 100 tpy in order to reclassify the facility as a synthetic minor source and therefore be exempt from Regulation 26. The permit was also issued to assign new source numbers to provide a logical process flow. The facility also replaced several pieces of equipment and constructed two new conveyors.

Permit modification # 0620-AR-4 dated 12/29/04 was issued to install a Bulk Bagger (BG-02) designated as SN-31. It also updated emissions limits which are based upon current AP-42 emission factors.

Permit modification # 0620-AR-5 dated 6/8/05 was issued to allow the replacement of two belt conveyors (SN-07 and SN-08) and a hopper (SN-13). It also allowed for the installation of two new belt conveyors (SN-32 and SN-36), a grizzle feeder (SN-33), a vibrating screen (SN-34), and a surge bin (SN-35). With those modifications the updated emission limits increased the PM emissions by 3.8 tpy and the PM₁₀ emissions by 1.5 tpy.

Permit # 0620-AR-6 was issued on October 30, 2006. A new portable crushing plant consisting of a hopper (SN-35), feeder (SN-36), a crusher (SN-37), and a stacking belt conveyor (SN-38) was installed. The stacking belt conveyor discharges the material into a product stockpile (SN-39). The portable crushing plant is powered by a diesel generator (SN-40). A vibrating screen (SN-34) and a belt conveyor (SN-36) were removed from the permit because the equipment was not installed. Because all of the equipment was not installed, the Surge Bin SB-01 (SN-35) was renamed as Surge Bin SB-01 (SN-34). Unimin also renamed SN-07 from BC-04 to BC-04A and SN-32 from BC-04A to BC-04B. The permitted emission increases 2.5 tpy of PM, 1.5 tpy of PM₁₀, 0.4 tpy of SO₂, 0.5 tpy of VOC, 0.9 tpy of CO, and 4.9 tpy of NO_x.

Section IV: EMISSION UNIT INFORMATION

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table.
 [Regulation 19, §19.501 *et seq.*, effective October 15, 2007 and A.C.A. §8-4-203 as
 referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Control Equipment	Pollutant	lb/hr	tpy
01	Natural Gas Fired Fluid Bed Dryer Dust Collection System - Wet Scrubber. Dryer Burner (BU-01)	Particulate emissions and products of combustion are controlled and vented through cyclone on wet scrubber. (99% efficient)	PM ₁₀	1.7	7.4
			SO ₂	0.3	1.1
			VOC	0.3	1.0
			CO	3.3	14.3
			NO _x	7.8	34.1
02	Screen House Collection System	Wet Scrubber (98.5% efficient)	PM ₁₀	1.0	4.0
02A	Grizzly Feeder Discharge Belt (BC-00)	NONE	PM ₁₀	0.1	0.1
03	Jaw Crusher Discharge Belt (BC-01)	NONE	PM ₁₀	0.1	0.1
04	Hammer Mill Discharge Belt (BC-02)	NONE	PM ₁₀	0.1	0.1
05	Raw Sand Silo Discharge Belt (BC-03A)	NONE	PM ₁₀	0.1	0.1
06	Vibrating Screen Feeder Belt (BC-03C)	NONE	PM ₁₀	0.1	0.1
07	Stockpile Discharge Belt (BC-04A)	NONE	PM ₁₀	0.1	0.1
08	Dryer Freed Belt (BC-05)	NONE	PM ₁₀	0.1	0.1
09	Bagging Belt (BC-12)	NONE	PM ₁₀	0.2	0.5
10	Plant Feed Stockpiles	NONE	PM ₁₀	0.9	3.6
11	Bagging Plant Elevator (BE-05)	NONE	PM ₁₀	0.2	0.5

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SN	Description	Control Equipment	Pollutant	lb/hr	tpy
12	Feed Hopper (HO-01)	NONE	PM ₁₀	0.1	0.1
13	Drain Bin Hopper (HO-02)	NONE	PM ₁₀	0.1	0.1
14	Raw Sand Silo (BN-01)	NONE	PM ₁₀	0.1	0.4
15	Raw Sand Silo (BN-02)	NONE	PM ₁₀	0.2	0.4
16	Bagger Bin (BN-15)	Bin Cover	PM ₁₀	0.1	0.2
17	Bagger. (BG-01)	NONE	PM ₁₀	0.1	0.2
18	Recycle Conveyor (BC-03B)	NONE	PM ₁₀	0.1	0.1
19	Jaw Crusher Vibratory Feeder (FE-01)	NONE	PM ₁₀	0.1	0.1
20	Raw Sand Vibratory Feeder (FE-03)	NONE	PM ₁₀	0.1	0.1
21	Raw Sand Vibratory Feeder (FE-04)	NONE	PM ₁₀	0.1	0.1
22	Vibrating Scalping Screen (VS-01)	NONE	PM ₁₀	0.3	1.3
23	Fresh Feed Vibrating Screen (VS-02)	NONE	PM ₁₀	0.3	1.2
24	VSI Discharge Screen (VS-03)	NONE	PM ₁₀	0.1	0.1
25	Primary Jaw Crusher (CR-01)	NONE	PM ₁₀	0.3	1.0
26	Hammer Mill (CR-02)	NONE	PM ₁₀	0.2	1.0
27	VSI Crusher (CR-03)	NONE	PM ₁₀	0.3	1.0
28	Transfer Belt (BC-02A)	NONE	PM ₁₀	0.1	0.1
29	Recirculation Belt (BC-01A)	NONE	PM ₁₀	0.1	0.1
30	Bag Plant Car Unloading Belt (BC-13)	NONE	PM ₁₀	0.2	0.5
31	Bulk Bagger (BG-02)	NONE	PM ₁₀	0.2	0.7
32	Belt Conveyor (BC-04B)	NONE	PM ₁₀	0.1	0.1
33	Grizzle Feeder (GF-01)	NONE	PM ₁₀	0.1	0.1

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SN	Description	Control Equipment	Pollutant	lb/hr	tpy
34	Surge Bin (SB-01)	NONE	PM ₁₀	0.1	0.3
35	Hopper (HO-200)	NONE	PM ₁₀	0.3	0.3
36	Feeder (FE-200)	NONE	PM ₁₀	0.3	0.3
37	Crusher (CR-200)	NONE	PM ₁₀	0.5	0.5
38	Stacking Belt Conveyor (BC-200)	NONE	PM ₁₀	0.3	0.3
39	Product Stockpile	NONE	PM ₁₀	0.2	0.7
40	Diesel Generator (GE-200)	NONE	PM ₁₀	0.4	0.4
			SO ₂	0.4	0.4
			VOC	0.4	0.4
			CO	1.1	1.1
			NO _x	4.9	4.9

2. The permittee shall not exceed the emission rates set forth in the following table.
 [Regulation 18, §18.801, effective February 15, 1999, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Control Equipment	Regulation	Pollutant	lb/hr	tpy
01	Natural Gas Fired Fluid Bed Dryer Dust Collection System Dryer Burner (BU-01)	Particulate emissions and products of combustion are controlled and vented through cyclone on wet scrubber. (99% efficient)	SIP	PM	3.7	15.9
02	Screen House Collection System	Wet Scrubber	NSPS	PM	5.7	24.6
02A	Grizzly Feeder Discharge Belt (BC-00)	NONE	NSPS	PM	0.1	0.3

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SN	Description	Control Equipment	Regulation	Pollutant	lb/hr	tpy
03	Jaw Crusher Discharge Belt (BC-01)	NONE	NSPS	PM	0.1	0.3
04	Hammer Mill Discharge Belt (BC-02)	NONE	NSPS	PM	0.1	0.3
05	Raw Sand Silo Discharge Belt (BC-03A)	NONE	NSPS	PM	0.1	0.3
06	Vibrating Screen Feeder Belt (BC-03C)	NONE	NSPS	PM	0.1	0.3
07	Stockpile Discharge Belt (BC-04A)	NONE	NSPS	PM	0.1	0.2
08	Dryer Feed Belt (BC-05)	NONE	NSPS	PM	0.1	0.2
09	Bagging Belt (BC-12)	NONE	SIP	PM	0.3	1.4
10	Dryer Feed Stockpile	NONE	SIP	PM	2.4	10.3
11	Bagging Elevator (BE-05)	NONE	SIP	PM	0.3	1.4
12	Feed Hopper (HO-01)	NONE	SIP	PM	0.1	0.3
13	Drain Bin Hopper (HO-02)	NONE	SIP	PM	0.1	0.2
14	Raw Sand Silo (BN-01)	NONE	SIP	PM	0.2	0.9
15	Raw Sand Silo (BN-02)	NONE	SIP	PM	0.2	0.9
16	Bagger Bin (BN-15)	Bin Cover	SIP	PM	1.0	3.7
17	Bagger (BG-01)	NONE	SIP	PM	0.9	3.7
18	Recycle Conveyor (BC-03B)	NONE	SIP	PM	0.1	0.2
19	Grizzly Feeder Screen (FE-01)	NONE	SIP	PM	0.1	0.3
20	Raw Sand Feeders (FE-03)	NONE	SIP	PM	0.1	0.3

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SN	Description	Control Equipment	Regulation	Pollutant	lb/hr	tpy
21	Raw Sand Feeder (FE-04)	NONE	SIP	PM	0.1	0.3
22	Vibrating Scalping Screen (VS-01)	NONE	NSPS	PM	0.9	3.9
23	Vibrating Screen (VS-02)	NONE	NSPS	PM	0.8	3.4
24	Vibrating Screen (VS-03)	NONE	NSPS	PM	0.1	0.2
25	Primary Jaw Crusher (CR-01)	NONE	SIP	PM	0.5	2.1
26	Hammer Mill (CR-02)	NONE	NSPS	PM	0.5	1.9
27	Crusher (CR-03)	NONE	NSPS	PM	0.5	1.9
28	Transfer Belt (BC-02A)	NONE	NSPS	PM	0.1	0.1
29	Recirculation Belt (BC-01A)	NONE	NSPS	PM	0.1	0.3
30	Retractable Conveyor (BC-13)	NONE	SIP	PM	0.3	1.4
31	Bulk Bagger (BG-02)	NONE	NSPS	PM	3.4	14.8
32	Belt Conveyor (BC-04B)	NONE	NSPS	PM	0.1	0.2
33	Grizzle Feeder (GF-01)	NONE	NSPS	PM	0.1	0.2
34	Surge Bin (SB-01)	NONE	NSPS	PM	0.2	0.7
35	Hopper (HO-200)	NONE	AR Code	PM	0.6	0.6
36	Feeder (FE-200)	NONE	AR Code	PM	0.6	0.6
37	Crusher (CR-200)	NONE	AR Code	PM	1.1	1.1
38	Stacking Belt Conveyor (BC-200)	NONE	AR Code	PM	0.6	0.6
39	Product Stockpile	NONE	AR Code	PM	1.9	1.9
40	Diesel Generator (GE-200)	NONE	SIP	PM	0.4	0.4

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3. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
01	10 - Dryer and Scrubber	§18.501
02	10	§18.501
02A	10	§19.503
03	10	§19.503
04	10	§19.503
05	10	§19.503
06	10	§19.503
07	10	§19.503
08	10	§19.503
09	20	§18.501
10	20	§18.501
11	20	§18.501
12	20	§19.503
13	20	§19.503
14	20	§18.501
15	20	§18.501
16	20	§18.501
17	20	§19.503
18	10	§19.503
19	10	§19.503
20	20	§18.501

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SN	Limit	Regulatory Citation
21	20	§18.501
22	10	§19.503
23	10	§19.503
24	10	§18.501
25	20	§18.501
26	15	§19.503
27	15	§19.503
28	10	§19.503
29	10	§19.503
30	20	§18.501
31	10	§19.503
32	10	§19.503
33	10	§19.503
34	10	§19.503
35	20	§18.501
36	20	§18.501
37	20	§18.501
38	20	§18.501
39	20	§18.501
40	20	§19.503

- The permittee shall not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation #18, if the emission of the air contaminant constitutes air pollution within the meaning of A.C.A. §8-4-303. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

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5. The permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne. [Regulation 18, §18.901 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
6. The permittee shall not exceed the maximum process material input rate from the fixed facility in excess of that specified in the confidential permit application dated October 26, 2007 per consecutive 12 month period. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
7. The permittee shall maintain a copy of the confidential permit application dated October 26, 2007 on site and maintain monthly records which demonstrate compliance with Specific Condition 6. The permittee shall update the records by the fifteenth day of the month following the month to which the records pertain. The permittee shall keep the records onsite, and make the records available to Department personnel upon request. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
8. The permittee shall not exceed the maximum process material input rate from the portable crushing plant in excess of that specified in the confidential permit application dated June 12, 2006 per consecutive 12 month period. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
9. The permittee shall not exceed the maximum fuel usage for the diesel generator for the portable crushing plant in excess of that specified in the confidential permit application dated June 12, 2006 per consecutive 12 month period. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
10. The permittee shall maintain a copy of the confidential permit application dated June 12, 2006 on site and maintain monthly records which demonstrate compliance with Specific Conditions 8 and 9. The permittee shall update the records by the fifteenth day of the month following the month to which the records pertain. The permittee shall keep the records onsite, and make the records available to Department personnel upon request. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
11. The permittee shall only use *pipeline quality natural gas* or *Propane* to fire the fluid bed dryer located at the facility. *Pipeline quality natural gas* is defined as a natural gas which contains 0.5 grains or less of total sulfur per 100 standard cubic feet, and pipeline natural gas must either be composed of at least 70 percent methane by volume or has a gross calorific value between 950 and 1100 Btu per standard cubic foot. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, 40 CFR §70.6, and 40 CFR §72.2]
12. The permittee shall operate the wet scrubber (SN-01) during the processing of silica sand material. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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NSPS Conditions

13. The permittee shall comply with all applicable regulations under the New Source Performance Standards of 40 CFR Part 60, Subpart OOO-*Standards of Performance for Nonmetallic Mineral processing Plans*. The permittee shall be limited to the following affected applicable sources in the fixed and portable nonmetallic mineral processing plant: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. [Regulation 19, §19.304 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
14. On and after the date on which the performance test required to be conducted by §60.8 is completed, the permittee shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which: [Regulation 19, §19.304 and 40 CFR §60.672 (a)(1)(2)]
 - a. Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and
 - b. Exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing control device. Facilities using a wet scrubber must comply with the reporting provisions of Specific Conditions 26, 27, & 29.
15. On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11, the permittee shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility (SN-02A, 03, 04, 05, 06, 07, 08, 13, 22, 23, 25, 28, 29, 31, 32, 33, and 34) any fugitive emissions which exhibit greater than 10 percent opacity, except as provided in Specific Conditions 16 and 17. [Regulation 19, §19.304 and 40 CFR §60.672 (b)]
16. On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11, the permittee shall not cause to be discharged into the atmosphere from any crusher (SN-26 and SN-27), at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity. [Regulation 19, §19.304 and 40 CFR §60.672 (c)]
17. If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in Specific Conditions 14, 15, & 16 or the building enclosing the affected facility or facilities must comply with the following emission limits: [Regulation 19, §19.304 and 40 CFR §60.672 (e)(1)(2)]
 - a. The permittee shall not cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent.

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- b. The permittee shall not cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emissions limits in Specific Condition 14.
18. When using a wet scrubber to control emissions from any affected facility (SN-02), the permittee shall install, calibrate, maintain and operate the following monitoring devices: [Regulation 19, §19.304 and 40 CFR §60.674 (a)(b)]
 - a. A device for the continuous measurement of the pressure loss of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 250 pascals ± 1 inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.
 - b. A device for the continuous measurement of the scrubbing liquid flow rate to the wet scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 5 percent of design scrubbing liquid flow rate and must be calibrated on an annual basis in accordance with manufacturer's instructions.
19. In conducting the performance tests required in §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR 60, Subpart A or other methods and procedures as specified in Specific Condition 20 through 25, except as provided in §60.8(b). [Regulation 19, §19.304 and 40 CFR §60.675 (a)]
20. The permittee shall determine compliance with the particulate matter standards in Specific Condition 14 as follows: [Regulation 19, §19.304 and 40 CFR §60.675 (b)]
 - a. Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall 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. 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..
21. In determining compliance with the particulate matter standards in Specific Conditions 15 & 16, the permittee shall use Method 9 and the procedures in §60.11, with the following additions: [Regulation 19, §19.304 and 40 CFR §60.675 (c)(1)]
 - a. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
 - b. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.

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- c. For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.
22. When determining compliance with the fugitive emissions standard for any affected facility described under Specific Condition 15, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply: [Regulation 19, §19.304 and 40 CFR §60.675 (c)(3)]
 - a. There are no individual readings greater than 10 percent opacity; and
 - b. There are no more than 3 readings of 10 percent for the 1-hour period.
23. When determining compliance with the fugitive emissions standard for any crusher at which a capture system is not used as described under Specific Condition 16, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply: [Regulation 19, §19.304 and 40 CFR §60.675 (c)(4)]
 - a. There are no individual readings greater than 15 percent opacity; and
 - b. There are no more than 3 readings of 15 percent for the 1-hour period.
24. In determining compliance with Specific Condition 17, the permittee shall use Method 22 to determine fugitive emissions. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes. [Regulation 19, §19.304 and 40 CFR §60.675 (d)]
25. To comply with Specific Condition 27, the permittee shall record the measurements as required in Specific Condition 26 using the monitoring devices in Specific Condition 18 during each particulate matter run and shall determine the averages. [Regulation 19, §19.304 and 40 CFR §60.675 (f)]
26. During the initial performance test of the wet scrubber (SN-02) and daily thereafter, the permittee shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate. [Regulation 19, §19.304 and 40 CFR §60.676 (c)]

Note: SN-02 was tested on June 7, 2005 for initial performance test. However, the permittee must retest the SN-02 based on the confidential permit application dated October 26, 2007.

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27. After the initial performance test of the wet scrubber (SN-02), the permittee shall submit semiannual reports to the Administrator of occurrences when the measurements of the scrubber pressure loss (or gain) and liquid flow rate differ by more than ± 30 percent from the averaged determined during the most recent performance test. [Regulation 19, §19.304 and 40 CFR §60.676 (d)]
28. The reports required under Specific Condition 27 shall be postmarked within 30 days following end of the second and fourth calendar quarters. [Regulation 19, §19.304 and 40 CFR §60.676 (e)]
29. The permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in Specific Condition 14, including reports of opacity observations made using Method 9 to demonstrate compliance with Specific Conditions 15 & 16, and reports of observations using Method 22 to demonstrate compliance with Specific Condition 17. [Regulation 19, §19.304 and 40 CFR §60.676 (f)]

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Section V: INSIGNIFICANT ACTIVITIES

The Department deems the following types of activities or emissions as insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in Regulation 18 and 19 Appendix A. Insignificant activity emission determinations rely upon the information submitted by the permittee in an application dated 1/30/2004, and additional information submitted on 3/26/04.

Description	Category
Four (4) Reddy fuel burning heaters < 1.0 MMBtu/hr	A-1
Tank TA-01 (Diesel), 15,000 gallon capacity distillate fuel oil No. 2 storage tank. The predicted emissions of < 0.01 tpy VOCs. at 60,000 gal/yr throughput, are well below 5 tpy of VOC and 1 tpy of any HAP.	A-13
Tank TA-02 (Gasoline), 2,000 gallon capacity gasoline storage tank. The predicted emissions of 0.32 tpy VOCs. at 12,000 gal/yr throughput, are well below 5 tpy of VOC and 1 tpy of any HAP.	A-13

Section VI: GENERAL CONDITIONS

1. Any terms or conditions included in this permit that specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.). Any terms or conditions included in this permit that specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
2. This permit does not relieve the owner or operator of the equipment and/or the facility from compliance with all applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated under the Act. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
3. The permittee will notify the Department in writing within thirty (30) days after commencement of construction, completion of construction, first operation of equipment and/or facility, and first attainment of the equipment and/or facility target production rate. [Regulation 19, §19.704 and/or A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
4. Construction or modification must commence within eighteen (18) months from the date of permit issuance. [Regulation 19, §19.410(B) and/or Regulation 18, §18.309(B) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
5. The permittee must keep records for five years to enable the Department to determine compliance with the terms of this permit such as hours of operation, throughput, upset conditions, and continuous monitoring data. The Department may use the records, at the discretion of the Department, to determine compliance with the conditions of the permit. [Regulation 19, §19.705 and/or Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
6. A responsible official must certify any reports required by any condition contained in this permit and submit any reports to the Department at the address below. [Regulation 19, §19.705 and/or Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

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Arkansas Department of Environmental Quality
Air Division
ATTN: Compliance Inspector Supervisor
5301 Northshore Drive
North Little Rock, AR 72118-5317

7. The permittee will test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) newly constructed or modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) existing equipment already operating according to the time frames set forth by the Department. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee must submit compliance test results to the Department within thirty (30) days after the completion of testing. [Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
8. The permittee will provide: [Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
 - a. Sampling ports adequate for applicable test methods
 - b. Safe sampling platforms
 - c. Safe access to sampling platforms
 - d. Utilities for sampling and testing equipment
9. The permittee will operate equipment, control apparatus and emission monitoring equipment within their design limitations. The permittee will maintain in good condition at all times equipment, control apparatus and emission monitoring equipment. [Regulation 19, §19.303 and/or Regulation 18, §18.1104 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
10. If the permittee exceeds an emission limit established by this permit, the permittee will be deemed in violation of said permit and will be subject to enforcement action. The Department may forego enforcement action for emissions exceeding any limits established by this permit provided the following requirements are met: [Regulation 19, §19.601 and/or Regulation 18, §18.1101 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
 - a. The permittee demonstrates to the satisfaction of the Department that the emissions resulted from an equipment malfunction or upset and are not the result of negligence or improper maintenance, and the permittee took all reasonable measures to immediately minimize or eliminate the excess emissions.
 - b. The permittee reports the occurrence or upset or breakdown of equipment (by telephone, facsimile, or overnight delivery) to the Department by the end of the next business day after the occurrence or the discovery of the occurrence.

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- c. The permittee must submit to the Department, within five business days after the occurrence or the discovery of the occurrence, a full, written report of such occurrence, including a statement of all known causes and of the scheduling and nature of the actions to be taken to minimize or eliminate future occurrences, including, but not limited to, action to reduce the frequency of occurrence of such conditions, to minimize the amount by which said limits are exceeded, and to reduce the length of time for which said limits are exceeded. If the information is included in the initial report, the information need not be submitted again.
11. The permittee shall allow representatives of the Department upon the presentation of credentials: [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
 - a. To enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of this permit;
 - b. To have access to and copy any records required to be kept under the terms and conditions of this permit. or the Act:
 - c. To inspect any monitoring equipment or monitoring method required in this permit;
 - d. To sample any emission of pollutants; and
 - e. To perform an operation and maintenance inspection of the permitted source.
12. The Department issued this permit in reliance upon the statements and presentations made in the permit application. The Department has no responsibility for the adequacy or proper functioning of the equipment or control apparatus. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
13. The Department may revoke or modify this permit when, in the judgment of the Department, such revocation or modification is necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated the Arkansas Water and Air Pollution Control Act. [Regulation 19, §19.410(A) and/or Regulation 18, §18.309(A) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
14. This permit may be transferred. An applicant for a transfer must submit a written request for transfer of the permit on a form provided by the Department and submit the disclosure statement required by Arkansas Code Annotated '8 1 106 at least thirty (30) days in advance of the proposed transfer date. The permit will be automatically transferred to the new permittee unless the Department denies the request to transfer within thirty (30) days of the receipt of the disclosure statement. The Department may deny a transfer on the basis of the information revealed in the disclosure statement or other investigation or, deliberate falsification or omission of relevant information. [Regulation 19, §19.407(B) and/or Regulation 18, §18.307(B) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

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15. This permit shall be available for inspection on the premises where the control apparatus is located. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
16. This permit authorizes only those pollutant emitting activities addressed herein. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
17. This permit supersedes and voids all previously issued air permits for this facility. [Regulation 18 and 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
18. The permittee must pay all permit fees in accordance with the procedures established in Regulation No. 9. [A.C.A §8-1-105(c)]

APPENDIX A

40 CFR 60 Subpart OOO

Standards of Performance for Nonmetallic Mineral Processing Plants

e-CFR Data is current as of November 16, 2007

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

[Browse Previous](#) | [Browse Next](#)

Subpart 000—Standards of Performance for Nonmetallic Mineral Processing Plants

Source: 51 FR 31337, Aug. 1, 1985, unless otherwise noted.

§ 60.670 Applicability and designation of affected facility.

(a)(1) Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart.

(2) The provisions of this subpart do not apply to the following operations: All facilities located in underground mines; and stand-alone screening operations at plants without crushers or grinding mills.

(b) An affected facility that is subject to the provisions of subpart F or I or that follows in the plant process any facility subject to the provisions of subparts F or I of this part is not subject to the provisions of this subpart.

(c) Facilities at the following plants are not subject to the provisions of this subpart:

(1) Fixed sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 23 megagrams per hour (25 tons per hour) or less;

(2) Portable sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 136 megagrams per hour (150 tons per hour) or less; and

(3) Common clay plants and pumice plants with capacities, as defined in §60.671, of 9 megagrams per hour (10 tons per hour) or less.

(d)(1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in §60.671, having the same function as the existing facility, the new facility is exempt from the provisions of §§60.672, 60.674, and 60.675 except as provided for in paragraph (d)(3) of this section.

(2) An owner or operator complying with paragraph (d)(1) of this section shall submit the information required in §60.676(a).

(3) An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in paragraph (d)(1) of this section and must comply with the provisions of §§60.672, 60.674 and 60.675.

(e) An affected facility under paragraph (a) of this section that commences construction, reconstruction, or modification after August 31, 1983 is subject to the requirements of this part.

(f) Table 1 of this subpart specifies the provisions of subpart A of this part 60 that apply and those that do not apply to owners and operators of affected facilities subject to this subpart.

Table 1—Applicability of Subpart A to Subpart OOO

Subpart A reference	Applies to Subpart OOO	Comment
60.1, Applicability	Yes	
60.2, Definitions	Yes	
60.3, Units and abbreviations	Yes	
60.4, Address:		
(a)	Yes	
(b)	Yes	
60.5, Determination of construction or modification	Yes	
60.6, Review of plans	Yes	
60.7, Notification and recordkeeping	Yes	Except in (a)(2) report of anticipated date of initial startup is not required (§60.676(h)).
60.8, Performance tests	Yes	Except in (d), after 30 days notice for an initially scheduled performance test, any rescheduled performance test requires 7 days notice, not 30 days (§60.675(g)).
60.9, Availability of information	Yes	
60.10, State authority	Yes	
60.11, Compliance with standards and maintenance requirements	Yes	Except in (b) under certain conditions (§§60.675 (c)(3) and (c)(4)), Method 9 observation may be reduced from 3 hours to 1 hour. Some affected facilities exempted from Method 9 tests (§60.675(h)).
60.12, Circumvention	Yes	
60.13, Monitoring requirements	Yes	
60.14, Modification	Yes	

60.15, Reconstruction	Yes	
60.16, Priority list	Yes	
60.17, Incorporations by reference	Yes	
60.18, General control device	No	Flares will not be used to comply with the emission limits.
60.19, General notification and reporting requirements	Yes	

[51 FR 31337, Aug. 1, 1985, as amended at 62 FR 31359, June 9, 1997]

§ 60.671 Definitions.

All terms used in this subpart, but not specifically defined in this section, shall have the meaning given them in the Act and in subpart A of this part.

Bagging operation means the mechanical process by which bags are filled with nonmetallic minerals.

Belt conveyor means a conveying device that transports material from one location to another by means of an endless belt that is carried on a series of idlers and routed around a pulley at each end.

Bucket elevator means a conveying device of nonmetallic minerals consisting of a head and foot assembly which supports and drives an endless single or double strand chain or belt to which buckets are attached.

Building means any frame structure with a roof.

Capacity means the cumulative rated capacity of all initial crushers that are part of the plant.

Capture system means the equipment (including enclosures, hoods, ducts, fans, dampers, etc.) used to capture and transport particulate matter generated by one or more process operations to a control device.

Control device means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more process operations at a nonmetallic mineral processing plant.

Conveying system means a device for transporting materials from one piece of equipment or location to another location within a plant. Conveying systems include but are not limited to the following: Feeders, belt conveyors, bucket elevators and pneumatic systems.

Crusher means a machine used to crush any nonmetallic minerals, and includes, but is not limited to, the following types: jaw, gyratory, cone, roll, rod mill, hammermill, and impactor.

Enclosed truck or railcar loading station means that portion of a nonmetallic mineral processing plant where nonmetallic minerals are loaded by an enclosed conveying system into enclosed trucks or railcars.

Fixed plant means any nonmetallic mineral processing plant at which the processing equipment specified in §60.670(a) is attached by a cable, chain, turnbuckle, bolt or other means (except electrical connections) to any anchor, slab, or structure including bedrock.

Fugitive emission means particulate matter that is not collected by a capture system and is released to the atmosphere at the point of generation.

Grinding mill means a machine used for the wet or dry fine crushing of any nonmetallic mineral. Grinding mills include, but are not limited to, the following types: hammer, roller, rod, pebble and ball, and fluid energy. The grinding mill includes the air conveying system, air separator, or air classifier, where such systems are used.

Initial crusher means any crusher into which nonmetallic minerals can be fed without prior crushing in the plant.

Nonmetallic mineral means any of the following minerals or any mixture of which the majority is any of the following minerals:

(a) Crushed and Broken Stone, including Limestone, Dolomite, Granite, Traprock, Sandstone, Quartz, Quartzite, Marl, Marble, Slate, Shale, Oil Shale, and Shell.

(b) Sand and Gravel.

(c) Clay including Kaolin, Fireclay, Bentonite, Fuller's Earth, Ball Clay, and Common Clay.

(d) Rock Salt.

(e) Gypsum.

(f) Sodium Compounds, including Sodium Carbonate, Sodium Chloride, and Sodium Sulfate.

(g) Pumice.

(h) Gilsonite.

(i) Talc and Pyrophyllite.

(j) Boron, including Borax, Kernite, and Colemanite.

(k) Barite.

(l) Fluorospar.

(m) Feldspar.

(n) Diatomite.

(o) Perlite.

(p) Vermiculite.

(q) Mica.

(r) Kyanite, including Andalusite, Sillimanite, Topaz, and Dumortierite.

Nonmetallic mineral processing plant means any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located, including lime plants, power plants, steel mills, asphalt concrete

plants, portland cement plants, or any other facility processing nonmetallic minerals except as provided in §60.670 (b) and (c).

Portable plant means any nonmetallic mineral processing plant that is mounted on any chassis or skids and may be moved by the application of a lifting or pulling force. In addition, there shall be no cable, chain, turnbuckle, bolt or other means (except electrical connections) by which any piece of equipment is attached or clamped to any anchor, slab, or structure, including bedrock that must be removed prior to the application of a lifting or pulling force for the purpose of transporting the unit.

Production line means all affected facilities (crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck and railcar loading stations) which are directly connected or are connected together by a conveying system.

Screening operation means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series, and retaining oversize material on the mesh surfaces (screens).

Size means the rated capacity in tons per hour of a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station; the total surface area of the top screen of a screening operation; the width of a conveyor belt; and the rated capacity in tons of a storage bin.

Stack emission means the particulate matter that is released to the atmosphere from a capture system.

Storage bin means a facility for storage (including surge bins) or nonmetallic minerals prior to further processing or loading.

Transfer point means a point in a conveying operation where the nonmetallic mineral is transferred to or from a belt conveyor except where the nonmetallic mineral is being transferred to a stockpile.

Truck dumping means the unloading of nonmetallic minerals from movable vehicles designed to transport nonmetallic minerals from one location to another. Movable vehicles include but are not limited to: trucks, front end loaders, skip hoists, and railcars.

Vent means an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying particulate matter emissions from one or more affected facilities.

Wet mining operation means a mining or dredging operation designed and operated to extract any nonmetallic mineral regulated under this subpart from deposits existing at or below the water table, where the nonmetallic mineral is saturated with water.

Wet screening operation means a screening operation at a nonmetallic mineral processing plant which removes unwanted material or which separates marketable fines from the product by a washing process which is designed and operated at all times such that the product is saturated with water.

[51 FR 31337, Aug. 1, 1985, as amended at 62 FR 31359, June 9, 1997]

§ 60.672 Standard for particulate matter.

(a) 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 transfer point on belt conveyors or from any other affected facility any stack emissions which:

(1) Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and

(2) Exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing control device. Facilities using a wet scrubber must comply with the reporting provisions of §60.676 (c), (d), and (e).

(b) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 percent opacity, except as provided in paragraphs (c), (d), and (e) of this section.

(c) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity.

(d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.

(e) If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a), (b) and (c) of this section, or the building enclosing the affected facility or facilities must comply with the following emission limits:

(1) No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in §60.671.

(2) No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emissions limits in paragraph (a) of this section.

(f) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator shall cause to be discharged into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent opacity.

(g) Owners or operators of multiple storage bins with combined stack emissions shall comply with the emission limits in paragraph (a)(1) and (a)(2) of this section.

(h) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, no owner or operator shall cause to be discharged into the atmosphere any visible emissions from:

(1) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to the next crusher, grinding mill or storage bin.

(2) Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, where such screening operations, bucket elevators, and belt conveyors process saturated materials up to the first crusher, grinding mill, or storage bin in the production line.

[51 FR 31337, Aug. 1, 1985, as amended at 62 FR 31359, June 9, 1997; 65 FR 61778, Oct. 17, 2000]

§ 60.673 Reconstruction.

(a) The cost of replacement of ore-contact surfaces on processing equipment shall not be considered in calculating either the "fixed capital cost of the new components" or the "fixed capital cost that would be required to construct a comparable new facility" under §60.15. Ore-contact surfaces are crushing surfaces; screen meshes, bars, and plates; conveyor belts; and elevator buckets.

(b) Under §60.15, the "fixed capital cost of the new components" includes the fixed capital cost of all depreciable components (except components specified in paragraph (a) of this section) which are or will be replaced pursuant to all continuous programs of component replacement commenced within any 2-year period following August 31, 1983.

§ 60.674 Monitoring of operations.

The owner or operator of any affected facility subject to the provisions of this subpart which uses a wet scrubber to control emissions shall install, calibrate, maintain and operate the following monitoring devices:

(a) A device for the continuous measurement of the pressure loss of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 250 pascals ± 1 inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.

(b) A device for the continuous measurement of the scrubbing liquid flow rate to the wet scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 5 percent of design scrubbing liquid flow rate and must be calibrated on an annual basis in accordance with manufacturer's instructions.

§ 60.675 Test methods and procedures.

(a) 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). Acceptable alternative methods and procedures are given in paragraph (e) of this section.

(b) The owner or operator shall determine compliance with the particulate matter standards in §60.672(a) as follows:

(1) Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall 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. 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.

(2) Method 9 and the procedures in §60.11 shall be used to determine opacity.

(c)(1) In determining compliance with the particulate matter standards in §60.672 (b) and (c), the owner or operator shall use Method 9 and the procedures in §60.11, with the following additions:

(i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

(ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.

(iii) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

(2) In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under §60.672(f) of this subpart, using Method 9, the duration of the Method 9 observations shall be 1 hour (ten 6-minute averages).

(3) When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) of this subpart, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:

- (i) There are no individual readings greater than 10 percent opacity; and
- (ii) There are no more than 3 readings of 10 percent for the 1-hour period.

(4) When determining compliance with the fugitive emissions standard for any crusher at which a capture system is not used as described under §60.672(c) of this subpart, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:

- (i) There are no individual readings greater than 15 percent opacity; and
- (ii) There are no more than 3 readings of 15 percent for the 1-hour period.

(d) In determining compliance with §60.672(e), the owner or operator shall use Method 22 to determine fugitive emissions. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

(e) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) For the method and procedure of paragraph (c) of this section, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:

- (i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.
- (ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.

(f) To comply with §60.676(d), the owner or operator shall record the measurements as required in §60.676(c) using the monitoring devices in §60.674 (a) and (b) during each particulate matter run and shall determine the averages.

(g) If, after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting any rescheduled performance test required in this section, the owner or operator of an affected facility shall submit a notice to the Administrator at least 7 days prior to any rescheduled performance test.

(h) Initial Method 9 performance tests under §60.11 of this part and §60.675 of this subpart are not required for:

- (1) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to, but not including the next crusher, grinding mill or storage bin.
- (2) Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, that process saturated materials up to the first crusher, grinding mill, or storage bin in the production line.

[54 FR 6680, Feb. 14, 1989, as amended at 62 FR 31360, June 9, 1997]

§ 60.676 Reporting and recordkeeping.

(a) Each owner or operator seeking to comply with §60.670(d) shall submit to the Administrator the following information about the existing facility being replaced and the replacement piece of equipment.

(1) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:

(i) The rated capacity in megagrams or tons per hour of the existing facility being replaced and

(ii) The rated capacity in tons per hour of the replacement equipment.

(2) For a screening operation:

(i) The total surface area of the top screen of the existing screening operation being replaced and

(ii) The total surface area of the top screen of the replacement screening operation.

(3) For a conveyor belt:

(i) The width of the existing belt being replaced and

(ii) The width of the replacement conveyor belt.

(4) For a storage bin:

(i) The rated capacity in megagrams or tons of the existing storage bin being replaced and

(ii) The rated capacity in megagrams or tons of replacement storage bins.

(b) [Reserved]

(c) During the initial performance test of a wet scrubber, and daily thereafter, the owner or operator shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate.

(d) After the initial performance test of a wet scrubber, the owner or operator shall submit semiannual reports to the Administrator of occurrences when the measurements of the scrubber pressure loss (or gain) and liquid flow rate differ by more than ± 30 percent from the averaged determined during the most recent performance test.

(e) The reports required under paragraph (d) shall be postmarked within 30 days following end of the second and fourth calendar quarters.

(f) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672 of this subpart, including reports of opacity observations made using Method 9 to demonstrate compliance with §60.672(b), (c), and (f), and reports of observations using Method 22 to demonstrate compliance with §60.672(e).

(g) The owner or operator of any screening operation, bucket elevator, or belt conveyor that processes saturated material and is subject to §60.672(h) and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the 10 percent opacity limit in §60.672(b) and the emission test requirements of §60.11 and this subpart. Likewise a screening operation, bucket elevator, or belt conveyor that processes unsaturated material but subsequently processes saturated material shall submit a report of

this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the no visible emission limit in §60.672(h).

(h) The subpart A requirement under §60.7(a)(2) for notification of the anticipated date of initial startup of an affected facility shall be waived for owners or operators of affected facilities regulated under this subpart.

(i) A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.

(1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

(2) For portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant.

(j) The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected facilities within the State will be relieved of the obligation to comply with the reporting requirements of this section, provided that they comply with requirements established by the State.

[51 FR 31337, Aug. 1, 1985, as amended at 54 FR 6680, Feb. 14, 1989; 62 FR 31360, June 9, 1997; 65 FR 61778, Oct. 17, 2000]

CERTIFICATE OF SERVICE

I, Pam Owen, hereby certify that a copy of this permit has been mailed by first class mail to Unimin Corporation, PO Box 29, Guion, AR, 72540-0029, on this 24th day of march 2008.

Pam Owen
Pam Owen, AAIL, Air Division