

January 18, 2011

Mike Maloney Plant Manager Unimin Corporation P.O. Box 29 Guion, AR 72540-0029

Dear Mr. Maloney:

The enclosed Permit No. 0620-AR-9 is your authority to construct, operate, and maintain the equipment and/or control apparatus as set forth in your application initially received on 9/10/2010.

After considering the facts and requirements of A.C.A. §8-4-101 et seq., and implementing regulations, I have determined that Permit No. 0620-AR-9 for the construction, operation and maintenance of an air pollution control system for Unimin Corporation to be issued and effective on the date specified in the permit, unless a Commission review has been properly requested under Arkansas Department of Pollution Control & Ecology Commission's Administrative Procedures, Regulation 8, within thirty (30) days after service of this decision.

The applicant or permittee and any other person submitting public comments on the record may request an adjudicatory hearing and Commission review of the final permitting decisions as provided under Chapter Six of Regulation No. 8, Administrative Procedures, Arkansas Pollution Control and Ecology Commission. Such a request shall be in the form and manner required by Regulation 8.603, including filing a written Request for Hearing with the APC&E Commission Secretary at 101 E. Capitol Ave., Suite 205, Little Rock, Arkansas 72201. If you have any questions about filing the request, please call the Commission at 501-682-7890.

Sincerely,

Mike Bates

Chief, Air Division

Enclosure

# **ADEQ** MINOR SOURCE **AIR PERMIT**

Permit No.: 0620-AR-9

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:

January 18, 2011

Date Mike Bates

Chief, Air Division

## Table of Contents

Section I: FACILITY INFORMATION	
Section II: INTRODUCTION	5
Summary of Permit Activity	5
Process Description	5
Regulations	
Total Allowable Emissions	
Section III: PERMIT HISTORY	8
Section IV: EMISSION UNIT INFORMATION	
NSPS Conditions	
Section V: INSIGNIFICANT ACTIVITIES	23
Section VI: GENERAL CONDITIONS	24
Appendix A - 40 CFR 60 Subpart OOO	

## 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<sub>x</sub> Nitrogen Oxide

PM Particulate Matter

PM<sub>10</sub> Particulate Matter Smaller Than Ten Microns

SO<sub>2</sub> Sulfur Dioxide

Tpy Tons Per Year

UTM Universal Transverse Mercator

VOC Volatile Organic Compound

## **Unimin Corporation** Permit #: 0620-AR-9

AFIN: 33-00002

## Section I: FACILITY INFORMATION

PERMITTEE:

**Unimin Corporation** 

AFIN:

33-00002

PERMIT NUMBER:

0620-AR-9

**FACILITY ADDRESS:** 

Main Street

Guion, AR 72540

MAILING ADDRESS:

P.O. Box 29

Guion, AR 72540-0029

COUNTY:

**Izard County** 

CONTACT NAME:

Mike Maloney

**CONTACT POSITION:** 

Plant Manager

TELEPHONE NUMBER:

870-346-5301

REVIEWING ENGINEER: Andrea Sandage

UTM North South (Y):

Zone 15: 3976028.68 m

UTM East West (X):

Zone 15: 595644.69 m

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 replace bucket elevator BE-01 (SN-01) which increased throughput capacity. BE-01 (SN-01) is now subject to 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants. VSI Crusher CR-03 (SN-27) was replaced with a crusher that was rated at the same capacity. The total permitted emission increases are 4.7 tpy of PM and 2.6 tpy of PM<sub>10</sub>.

## **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.

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 and conveying to the new truck load out 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). Material can also be transferred to the new screening circuit (SN-41) where it is size separated. From this circuit, material is conveyed into existing storage bins. From the existing storage bins the material can be conveyed to either existing screens (SN-02), existing rail loadout or new truck loadout (SN-42).

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 June 18, 2010
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective July 18, 2009
40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants

## **Total Allowable Emissions**

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				
Pollutant	Emis	sion Rates		
Ponutant	lb/hr	tpy		
PM	33.7	123.6		
$PM_{10}$	11.7	34.7		
SO <sub>2</sub>	0.7	1.5		
VOC	0.7	1.4		
СО	4.4	15.4		
$NO_x$	12.7	39.0		

#### 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  $PM_{10}$  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 PM<sub>10</sub> 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 PM<sub>10</sub>, 0.4 tpy of SO<sub>2</sub>, 0.5 tpy of VOC, 0.9 tpy of CO, and 4.9 tpy of NO<sub>x</sub>.

Permit # 0620-AR-7 was issued on March 24, 2008 to allow the installation of 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  $PM_{10}$ .

Permit # 0620-AR-8 was issued on December 10, 2009 to allow the installation of the following process equipment: 4 belt conveyors and 5 bucket elevators, which are controlled by the existing screenhouse wet scrubber SN-02 (WS-02), one feed bin and 4 product screens, which are controlled by dust collector SN-41 (DC-03) and one each belt conveyor, storage bin, and truck loadout which are controlled by dust collector SN-42 (DC-04). The total increase in emissions were 7.8 tons per year (tpy) of PM and 2.8 tpy of PM<sub>10</sub>.

## 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., 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
			PM <sub>10</sub>	2.4	10.5
	Natural Gas Fired Fluid Bed	Particulate emissions and products of	SO <sub>2</sub>	0.3	1.1
01	Dryer Dust Collection System – Wet Scrubber.	combustion are controlled and vented through cyclone on wet scrubber.	VOC	0.3	1.0
	Dryer Burner (BU-01)	(99% efficient)	СО	3.3	14.3
			NO <sub>x</sub>	7.8	34.1
02	Screen House Collection System	Wet Scrubber (98.5% efficient)	PM <sub>10</sub>	1.5	6.3
02A	Grizzly Feeder Discharge Belt (BC-00)	NONE	PM <sub>10</sub>	0.1	0.1
03	Jaw Crusher Discharge Belt (BC-01)	NONE	PM <sub>10</sub>	0.1	0.1
04	Hammer Mill Discharge Belt (BC-02)	NONE	PM <sub>10</sub>	0.1	0.1
05	Raw Sand Silo Discharge Belt (BC-03A)	NONE	PM <sub>10</sub>	0.1	0.1
06	Vibrating Screen Feeder Belt (BC-03C)	NONE	PM <sub>10</sub>	0.1	0.1
07	Stockpile Discharge Belt (BC-04A)	NONE	PM <sub>10</sub>	0.1	0.1
08	Dryer Freed Belt (BC-05)	NONE	PM <sub>10</sub>	0.1	0.1
09	Bagging Belt (BC-12)	NONE	PM <sub>10</sub>	0.2	0.5
10	Plant Feed Stockpiles	NONE	PM <sub>10</sub>	0.9	3.6
11	Bagging Plant Elevator (BE-05)	NONE	PM <sub>10</sub>	0.2	0.5
12	Feed Hopper (HO-01)	NONE	PM <sub>10</sub>	0.1	0.1
13	Drain Bin Hopper (HO-02)	NONE	PM <sub>10</sub>	0.1	0.1
14	Raw Sand Silo (BN-01)	NONE	PM <sub>10</sub>	0.1	0.4
15	Raw Sand Silo (BN-02)	NONE	PM <sub>10</sub>	0.2	0.4
16	Bagger Bin (BN-15)	Bin Cover	PM <sub>10</sub>	0.1	0.2

SN	Description	Control Equipment	Pollutant	lb/hr	tpy
17	Bagger (BG-01)	NONE	PM <sub>10</sub>	0.1	0.2
18	Recycle Conveyor (BC-03B)	NONE	PM <sub>10</sub>	0.1	0.1
19	Jaw Crusher Vibratory Feeder (FE-01)	NONE	PM <sub>10</sub>	0.1	0.1
20	Raw Sand Vibratory Feeder (FE-03)	NONE	PM <sub>10</sub>	0.1	0.1
21	Raw Sand Vibratory Feeder (FE-04)	NONE	PM <sub>10</sub>	0.1	0.1
22	Vibrating Scalping Screen (VS-01)	NONE	PM <sub>10</sub>	0.3	1.3
23	Fresh Feed Vibrating Screen (VS-02)	NONE	PM <sub>10</sub>	0.3	1.2
24	VSI Discharge Screen (VS-03)	NONE	PM <sub>10</sub>	0.1	0.1
25	Primary Jaw Crusher (CR-01)	NONE	PM <sub>10</sub>	0.3	1.0
26	Hammer Mill (CR-02)	NONE	PM <sub>10</sub>	0.2	1.0
27	VSI Crusher (CR-03)	NONE	PM <sub>10</sub>	0.3	1.0
28	Transfer Belt (BC-02A)	NONE	PM <sub>10</sub>	0.1	0.1
29	Recirculation Belt (BC-01A)	NONE	PM <sub>10</sub>	0.1	0.1
30	Bag Plant Car Unloading Belt (BC-13)	NONE	PM <sub>10</sub>	0.2	0.5
31	Bulk Bagger (BG-02)	NONE	PM <sub>10</sub>	0.2	0.7
32	Belt Conveyor (BC-04B)	NONE	PM <sub>10</sub>	0.1	0.1
33	Grizzle Feeder (GF-01)	NONE	PM <sub>10</sub>	0.1	0.1
34	Surge Bin (SB-01)	NONE	PM <sub>10</sub>	0.1	0.3
35	Hopper (HO-200)	NONE	PM <sub>10</sub>	0.3	0.3
36	Feeder (FE-200)	NONE	PM <sub>10</sub>	0.3	0.3
37	Crusher (CR-200)	NONE	PM <sub>10</sub>	0.5	0.5
38	Stacking Belt Conveyor (BC-200)	NONE	PM <sub>10</sub>	0.3	0.3
39	Product Stockpile	NONE	PM <sub>10</sub>	0.2	0.7
40	Diesel Generator (GE-200)	NONE	PM <sub>10</sub>	0.4	0.4
		· · · · · · · · · · · · · · · · · · ·	SO <sub>2</sub>	0.4	0.4

SN	Description	Control Equipment	Pollutant	lb/hr	tpy
			VOC	0.4	0.4
			СО	1.1	1.1
ļ			NO <sub>x</sub>	4.9	4.9
41	Secondary Screen Collection – Dust Collector	Fabric Filter (98.5% efficient)	PM <sub>10</sub>	0.2	0.5
42	Loading Collection – Dust Collector	Fabric Filter (98.5% efficient)	PM <sub>10</sub>	0.1	0.3

2. The permittee shall not exceed the emission rates set forth in the following table. [Regulation 18, §18.801 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	5.2	22.5
02	Screen House Collection System	Wet Scrubber	NSPS	PM	7.0	30.5
02A	Grizzly Feeder Discharge Belt (BC-00)	NONE	NSPS	PM	0.1	0.3
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)	w Sand Silo Discharge		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 Freed Belt (BC-05)	NONE	NSPS	PM	0.1	0.2
09	Bagging Belt (BC-12)	NONE	SIP	PM	0.3	1.4

SN	Description	Control Equipment	Regulation	Pollutant	lb/hr	tpy
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
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

SN	Description	Control Equipment	Regulation	Pollutant	lb/hr	tpy
36	Feeder (FE-200)	NONE	AR Code	PM	0.6	0.6
37	7 Crusher (CR-200) NONE AR Co		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	0 Diesel Generator (GE-200) NONI		SIP	PM	0.4	0.4
41	Secondary Screen Collection  – Dust Collector	Fabric Filter (98.5% efficient)	NSPS	PM	0.9	3.5
42	Loading Collection – Dust Collector	Fabric Filter (98.5% efficient)	NSPS	PM	1.2	5.0

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

SN	Limit	Regulatory Citation
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
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

SN	Limit	Regulatory Citation
41	20	§18.501
42	20	§18.501

- 4. 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]
- 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 September 10, 2010 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 September 10, 2010 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]

#### **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, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR §60.670]
- 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:
  - a. Contain particulate matter in excess of 0.032 g/dscm (0.014 gr/dscf) for equipment installed after April 22, 2008. [Regulation 19, §19.304 and 40 CFR §60.672 (a)]
  - b. Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf) for equipment installed after August 31, 1983 but before April 22, 2008. [Regulation 19, §19.304 and 40 CFR §60.672]
  - c. 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 #28, #30, and #31. [Regulation 19, §19.304 and 40 CFR §60.672 (a)(1)(2)]

- 15. The permittee, as an affected facility that commence construction, modification, or reconstruction on or after April 22, 2008 and with capture systems used to capture and transport particulate matter to a control device, shall conduct an initial performance test according to §60.8 of this part and §60.675 of this subpart; and perform monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e). Affected facilities must meet the stack emission limits and compliance requirements in Table 2 of this subpart within 60 days 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 §60.8. [Regulation 19, §19.304 and 40 CFR § 60.672(a)]
- 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 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 #17 and #18. [Regulation 19, §19.304 and 40 CFR §60.672 (b)]
- 17. 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)]
- 18. 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, #16, & #17 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.
  - 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.
- 19. When using a wet scrubber to control emissions from any affected facility (SN-01 and 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  $\pm 250$  pascals  $\pm 1$  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.
- 20. The permittee must perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The owner or operator must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles. The owner or operator must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under §60.676(b). [Regulation 19, §19.304 and 40 CFR §60.674(b), (b)(1), (b)(1)(i&ii) and (b)(2)]
  - a. If an affected facility relies on water carryover from upstream water sprays to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement specified in Table 3 of this subpart provided that the affected facility meets the criteria in paragraphs (b)(1)(i) and (ii) of this section:
    - i. The owner or operator of the affected facility conducts periodic inspections of the upstream water spray(s) that are responsible for controlling fugitive emissions from the affected facility. These inspections are conducted according to paragraph (b) of this section and §60.676(b), and
    - ii. The owner or operator of the affected facility designates which upstream water spray(s) will be periodically inspected at the time of the initial performance test required under §60.11 of this part and §60.675 of this subpart.
  - b. If an affected facility that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (for example, water from recent rainfall), the logbook entry required under §60.676(b) must specify the control mechanism being used instead of the water sprays.
- 21. 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 #22 through #27, except as provided in §60.8(b). [Regulation 19, §19.304 and 40 CFR §60.675 (a)]

- 22. 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.
- 23. In determining compliance with the particulate matter standards in Specific Conditions #16 & #17, 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.
  - 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.
- 24. When determining compliance with the fugitive emissions standard for any affected facility 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)(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.
- When determining compliance with the fugitive emissions standard for any crusher at which a capture system is not used as described under Specific Condition #17, 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.

- In determining compliance with Specific Condition #18, 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)]
- To comply with Specific Condition #30, the permittee shall record the measurements as required in Specific Condition #28 using the monitoring devices in Specific Condition #19 during each particulate matter run and shall determine the averages. [Regulation 19, §19.304 and 40 CFR §60.675 (f)]
- 28. The permittee must record each periodic inspection required under §60.674(b) or (c), including dates and any corrective actions taken, in a logbook (in written or electronic format). The owner or operator must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Administrator upon request. [Regulation 19, §19.304 and 40 CFR §60.676(b) (1)]
- During the initial performance test of the wet scrubber (SN-01 and 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 August 13, 2009. SN-01 must be tested based on permit application dated September 9, 2010.
- 30. After the initial performance test of the wet scrubber (SN-01 and 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)]
- 31. The reports required under Specific Condition #30 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)]
- 32. 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 #16 & #17, and reports of observations using Method 22 to demonstrate compliance with Specific Condition # 18. [Regulation 19, §19.304 and 40 CFR §60.676 (f)]

- 33. The subpart A requirement under §60.7(a)(1) for notification of the date construction or reconstruction commenced is waived for affected facilities under this subpart. [Regulation 19, §19.304 and 40 CFR §60.676(h)]
- 34. The permittee shall visibly designate the equipment installation date for SN-02 for ease of inspection and verification of Specific Condition #14. [Regulation 19, §19.304 and 40 CFR §60.672]
- 35. The permittee shall visibly designate the equipment installation date for BE-01 (SN-01) and CR-03 (SN-27) for ease of inspection and verification of Specific Condition #14. [Regulation 19, §19.304 and 40 CFR §60.672]

## 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 shall 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]
- 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]

Arkansas Department of Environmental Quality Air Division

ATTN: Compliance Inspector Supervisor

> 5301 Northshore Drive North Little Rock, AR 72118-5317

- 7. The permittee shall 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 shall 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; and
  - d. Utilities for sampling and testing equipment
- 9. The permittee shall operate equipment, control apparatus and emission monitoring equipment within their design limitations. The permittee shall 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.
  - 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]
- 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]

- 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)]
- 19. The permittee may request in writing and at least 15 days in advance of the deadline, an extension to any testing, compliance or other dates in this permit. No such extensions are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion in the following circumstances:
  - a. Such an extension does not violate a federal requirement;
  - b. The permittee demonstrates the need for the extension; and
  - c. The permittee documents that all reasonable measures have been taken to meet the current deadline and documents reasons it cannot be met.

[Regulation 18, §18.314(A), Regulation 19, §19.416(A), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

- 20. The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Department approval. Any such emissions shall be included in the facilities total emissions and reported as such. The Department may grant such a request, at its discretion under the following conditions:
  - a. Such a request does not violate a federal requirement;
  - b. Such a request is temporary in nature;
  - c. Such a request will not result in a condition of air pollution;
  - d. The request contains such information necessary for the Department to evaluate the request, including but not limited to, quantification of such emissions and the date/time such emission will occur:
  - e. Such a request will result in increased emissions less than five tons of any individual criteria pollutant, one ton of any single HAP and 2.5 tons of total HAPs; and
  - f. The permittee maintains records of the dates and results of such temporary emissions/testing.

[Regulation 18, §18.314(B), Regulation 19, §19.416(B), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

- 21. The permittee may request in writing and at least 30 days in advance, an alternative to the specified monitoring in this permit. No such alternatives are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion under the following conditions:
  - a. The request does not violate a federal requirement;
  - b. The request provides an equivalent or greater degree of actual monitoring to the current requirements; and
  - c. Any such request, if approved, is incorporated in the next permit modification application by the permittee.

[Regulation 18, §18.314(C), Regulation 19, §19.416(C), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

## APPENDIX A

40 CFR 60 Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants

## e-CFR Data is current as of September 13, 2010

#### **Title 40: Protection of Environment**

PART 60-STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Browse Previous | Browse Next

## Subpart OOO—Standards of Performance for Nonmetallic Mineral Processing Plants

Source: 74 FR 19309, Apr. 28, 2009, 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; plants without crushers or grinding mills above ground; and wet material processing operations (as defined in §60.671).
- (b) An affected facility that is subject to the provisions of subparts F or I of this part 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, and there is no increase in the amount of emissions, 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, modification, or reconstruction 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 do not apply to owners and operators of affected facilities subject to this subpart or that apply with certain exceptions.

#### § 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 affected facilities 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 affected facilities 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.

Crush or Crushing means to reduce the size of nonmetallic mineral material by means of physical impaction of the crusher or grinding mill upon the material

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, tumbuckle, 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:

(1) Crushed and Broken Ston	e, including Limestone,	Dolomite, Granit	e, Traprock	, Sandstone,	Quartz,	Quartzite,	Marl,	Marble,	Slate,	Shale,	Oil Shal
and Shell.			-								

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

(5) Gypsum (natural or synthetic).

(2) Sand and Gravel.

(4) Rock Salt.

(6) Sodium Compounds.	including Sodium	Carbonate Si	odium Chloride	and Sodium Sulfate

(7) Pumice.
(8) Gilsonite.

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

(11) Barite.

(9) Talc and Pyrophyllite.

(12) Fluorospar.

(13) Feldspar.

(14) Diatomite.

- (15) Perlite.
- (16) Vermiculite.
- (17) Mica,
- (18) 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.

Saturated material means, for purposes of this subpart, mineral material with sufficient surface moisture such that particulate matter emissions are not generated from processing of the material through screening operations, bucket elevators and belt conveyors. Material that is wetted solely by wet suppression systems is not considered to be "saturated" for purposes of this definition.

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). Grizzly feeders associated with truck dumping and static (non-moving) grizzlies used anywhere in the nonmetallic mineral processing plant are not considered to be screening operations.

Seasonal shut down means shut down of an affected facility for a period of at least 45 consecutive days due to weather or seasonal market conditions.

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) of 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 material processing operation(s) means any of the following:

- (1) Wet screening operations (as defined in this section) and subsequent screening operations, bucket elevators and belt conveyors in the production line that process saturated materials (as defined in this section) up to the first crusher, grinding mill or storage bin in the production line; or
- (2) Screening operations, bucket elevators and belt conveyors in the production line downstream of wet mining operations (as defined in this section) that process saturated materials (as defined in this section) up to the first crusher, grinding mill or storage bin in the production line.

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.

#### § 60.672 Standard for particulate matter (PM).

(a) Affected facilities must meet the stack emission limits and compliance requirements in Table 2 of this subpart within 60 days 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 §60.8. The

requirements in Table 2 of this subpart apply for affected facilities with capture systems used to capture and transport particulate matter to a control device

- (b) Affected facilities must meet the fugitive emission limits and compliance requirements in Table 3 of this subpart within 60 days 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 requirements in Table 3 of this subpart apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems.
- (c) [Reserved]
- (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) and (b) of this section, or the building enclosing the affected facility or facilities must comply with the following emission limits:
- (1) Fugitive emissions from the building openings (except for vents as defined in §60.671) must not exceed 7 percent opacity; and
- (2) Vents (as defined in §60.671) in the building must meet the applicable stack emission limits and compliance requirements in Table 2 of this subpart.
- (f) Any baghouse that controls emissions from only an individual, enclosed storage bin is exempt from the applicable stack PM concentration limit (and associated performance testing) in Table 2 of this subpart but must meet the applicable stack opacity limit and compliance requirements in Table 2 of this subpart. This exemption from the stack PM concentration limit does not apply for multiple storage bins with combined stack emissions.

#### § 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.

- (a) 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:
- (1) 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.
- (2) 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.
- (b) The owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses wet suppression to control emissions from the affected facility must perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The owner or operator must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles. The owner or operator must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under §60.676(b).
- (1) If an affected facility relies on water carryover from upstream water sprays to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement specified in Table 3 of this subpart provided that the affected facility meets the criteria in paragraphs (b)(1)(i) and (ii) of this section:
- (i) The owner or operator of the affected facility conducts periodic inspections of the upstream water spray(s) that are responsible for controlling fugitive emissions from the affected facility. These inspections are conducted according to paragraph (b) of this section and §60.676(b), and
- (ii) The owner or operator of the affected facility designates which upstream water spray(s) will be periodically inspected at the time of the initial performance test required under §60.11 of this part and §60.675 of this subpart.
- (2) If an affected facility that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (for example, water from recent rainfall), the logbook entry required under §60.676(b) must specify the control mechanism being used instead of the water sprays.

- (c) Except as specified in paragraph (d) or (e) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions must conduct quarterly 30-minute visible emissions inspections using EPA Method 22 (40 CFR part 60, Appendix A-7). The Method 22 (40 CFR part 60, Appendix A-7) test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed, the owner or operator of the affected facility must initiate corrective action within 24 hours to return the baghouse to normal operation. The owner or operator must record each Method 22 (40 CFR part 60, Appendix A-7) test, including the date and any corrective actions taken, in the logbook required under §60.676(b). The owner or operator of the affected facility may establish a different baghouse-specific success level for the visible emissions test (other than no visible emissions) by conducting a PM performance test according to §60.675(b) simultaneously with a Method 22 (40 CFR part 60, Appendix A-7) to determine what constitutes normal visible emissions from that affected facility's baghouse when it is in compliance with the applicable PM concentration limit in Table 2 of this subpart. The revised visible emissions success level must be incorporated into the permit for the affected facility.
- (d) As an alternative to the periodic Method 22 (40 CFR part 60, Appendix A-7) visible emissions inspections specified in paragraph (c) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions may use a bag leak detection system. The owner or operator must install, operate, and maintain the bag leak detection system according to paragraphs (d)(1) through (3) of this section.
- (1) Each bag leak detection system must meet the specifications and requirements in paragraphs (d)(1)(i) through (viii) of this section.
- (i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (0.00044 grains per actual cubic foot) or less.
- (ii) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator shall continuously record the output from the bag leak detection system using electronic or other means ( e.g. , using a strip chart recorder or a data logger).
- (iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (d)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.
- (iv) In the initial adjustment of the bag leak detection system, the owner or operator must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.
- (v) Following initial adjustment, the owner or operator shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided in paragraph (d)(1)(vi) of this section.
- (vi) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (d)(2) of this section.
- (vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.
- (viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- (2) The owner or operator of the affected facility must develop and submit to the Administrator or delegated authority for approval of a site-specific monitoring plan for each bag leak detection system. The owner or operator must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in paragraphs (d)(2)(i) through (vi) of this section.
- (i) Installation of the bag leak detection system;
- (ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;
- (iii) Operation of the bag leak detection system, including quality assurance procedures;
- (iv) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;
- (v) How the bag leak detection system output will be recorded and stored; and
- (vi) Corrective action procedures as specified in paragraph (d)(3) of this section. In approving the site-specific monitoring plan, the Administrator or delegated authority may allow owners and operators more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.
- (3) For each bag leak detection system, the owner or operator must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph (d)(2)(vi) of this section, the owner or operator must alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:
- (i) Inspecting the fabric filter for air leaks, tom or broken bags or filter media, or any other condition that may cause an increase in PM emissions;
- (ii) Sealing off defective bags or filter media;

- (iii) Replacing defective bags or filter media or otherwise repairing the control device;
- (iv) Sealing off a defective fabric filter compartment;
- (v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or
- (vi) Shutting down the process producing the PM emissions.
- (e) As an alternative to the periodic Method 22 (40 CFR part 60, Appendix A–7) visible emissions inspections specified in paragraph (c) of this section, the owner or operator of any affected facility that is subject to the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA) may follow the continuous compliance requirements in row 1 items (i) through (iii) of Table 6 to Subpart AAAAA of 40 CFR part 63.

#### § 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 appendices A-1 through A-7 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 PM standards in §60.672(a) as follows:
- (1) Except as specified in paragraphs (e)(3) and (4) of this section, Method 5 of Appendix A–3 of this part or Method 17 of Appendix A–6 of this part shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5 (40 CFR part 60, Appendix A–3), 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 of Appendix A-4 of this part 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) or §60.672(e)(1), the owner or operator shall use Method 9 of Appendix A-4 of this part 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 of Appendix A-4 of this part, 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)(i) 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 (40 CFR part 60, Appendix A–4), the duration of the Method 9 (40 CFR part 60, Appendix A–4) observations shall be 1 hour (ten 6-minute averages).
- (ii) The duration of the Method 9 (40 CFR part 60, Appendix A-4) observations may be reduced to the duration the affected facility operates (but not less than 30 minutes) for baghouses that control storage bins or enclosed truck or railcar loading stations that operate for less than 1 hour at a time.
- (3) When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) or §60.672(e)(1) of this subpart, the duration of the Method 9 (40 CFR part 60, Appendix A–4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Table 3 of this subpart must be based on the average of the five 6-minute averages.
- (d) To demonstrate compliance with the fugitive emission limits for buildings specified in §60.672(e)(1), the owner or operator must complete the testing specified in paragraph (d)(1) and (2) of this section. Performance tests must be conducted while all affected facilities inside the building are operating.
- (1) If the building encloses any affected facility that commences construction, modification, or reconstruction on or after April 22, 2008, the owner or operator of the affected facility must conduct an initial Method 9 (40 CFR part 60, Appendix A-4) performance test according to this section and §60.11.
- (2) If the building encloses only affected facilities that commenced construction, modification, or reconstruction before April 22, 2008, and the owner or operator has previously conducted an initial Method 22 (40 CFR part 60, Appendix A–7) performance test showing zero visible emissions, then the owner or operator has demonstrated compliance with the opacity limit in §60.672(e)(1). If the owner or operator has not conducted an initial performance test for the building before April 22, 2008, then the owner or operator must conduct an initial Method 9 (40 CFR part 60, Appendix A–4) performance test according to this section and §60.11 to show compliance with the opacity limit in §60.672(e)(1).
- (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.
- (2) A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met:
- (i) No more than three emission points may be read concurrently.
- (ii) All three emission points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.
- (iii) If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point.
- (3) Method 5I of Appendix A-3 of this part may be used to determine the PM concentration as an alternative to the methods specified in paragraph (b)(1) of this section. Method 5I (40 CFR part 60, Appendix A-3) may be useful for affected facilities that operate for less than 1 hour at a time such as (but not limited to) storage bins or enclosed truck or railcar loading stations.
- (4) In some cases, velocities of exhaust gases from building vents may be too low to measure accurately with the type S pitot tube specified in EPA Method 2 of Appendix A–1 of this part [i.e., velocity head <1.3 mm H<sub>2</sub>O (0.05 in, H<sub>2</sub>O)] and referred to in EPA Method 5 of Appendix A–3 of this part. For these conditions, the owner or operator may determine the average gas flow rate produced by the power fans (i.e.g., from vendor-supplied fan curves) to the building vent. The owner or operator may calculate the average gas velocity at the building vent measurement site using Equation 1 of this section and use this average velocity in determining and maintaining isokinetic sampling rates.

$$v_e = \frac{Q_I}{A_e} \qquad (E \neq 1)$$

Where:

V<sub>e</sub>= average building vent velocity (feet per minute);

Q<sub>f</sub>= average fan flow rate (cubic feet per minute); and

A<sub>e</sub>= area of building vent and measurement location (square feet).

- (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)(1) and (2) during each particulate matter run and shall determine the averages.
- (g) For performance tests involving only Method 9 (40 CFR part 60 Appendix A-4) testing, the owner or operator may reduce the 30-day advance notification of performance test in §60.7(a)(6) and 60.8(d) to a 7-day advance notification.
- (h) [Reserved]
- (i) If the initial performance test date for an affected facility falls during a seasonal shut down (as defined in §60.671 of this subpart) of the affected facility, then with approval from the permitting authority, the owner or operator may postpone the initial performance test until no later than 60 calendar days after resuming operation of the affected facility.

#### § 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.

(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)(1) Owners or operators of affected facilities (as defined in §§60.670 and 60.671) for which construction, modification, or reconstruction commenced on or after April 22, 2008, must record each periodic inspection required under §60.674(b) or (c), including dates and any corrective actions taken, in a logbook (in written or electronic format). The owner or operator must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Administrator upon request.
(2) For each bag leak detection system installed and operated according to §60.674(d), the owner or operator must keep the records specified in paragraphs (b)(2)(i) through (iii) of this section.
(i) Records of the bag leak detection system output;
(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and
(iii) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the cause of the alarm was alleviated within 3 hours of the alarm.
(3) The owner or operator of each affected facility demonstrating compliance according to §60.674(e) by following the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA) must maintain records of visible emissions observations required by §63.7132(a)(3) and (b) of 40 CFR part 63, subpart AAAAA.
(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 and liquid flow rate decrease by more than 30 percent from the average determined during the most recent performance test.
(e) The reports required under paragraph (d) of this section shall be postmarked within 30 days following end of the second and fourth calendar quarters.

(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.

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

Appendix A-4) to demonstrate compliance with §60.672(b), (e) and (f).

(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.

(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 (40 CFR part 60,

(g) The owner or operator of any wet material processing operation that processes saturated and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. At the time of such change, this screening operation, bucket elevator, or bett conveyor becomes subject to the applicable opacity limit in §60.672(b) and the emission test requirements of §60.11.

(h) The subpart A requirement under §60.7(a)(1) for notification of the date construction or reconstruction commenced is waived for affected facilities under this subpart.

(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.

## Table 1 to Subpart OOO—Exceptions to Applicability of Subpart A to Subpart OOO

Table 1 to Subpart OOO—Exceptions to Applicability of Subpart A to Subpart OOO

Subpart A reference	Applies to subpart OOO	Explanation
60.4, Address	Yes	Except in §60.4(a) and (b) submittals need not be submitted to both the EPA Region and delegated State authority (§60.676(k)).
60.7, Notification and recordkeeping	Yes	Except in (a)(1) notification of the date construction or reconstruction commenced (§60.676(h)).
		Also, except in (a)(6) performance tests involving only Method 9 (40 CFR part 60, Appendix A–4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.8, Performance tests	Yes	Except in (d) performance tests involving only Method 9 (40 CFR part 60, Appendix A-4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.11, Compliance with standards and maintenance requirements	Yes	Except in (b) under certain conditions (§§60.675(c)), Method 9 (40 CFR part 60, Appendix A-4) observation is reduced from 3 hours to 30 minutes for fugitive emissions.
60.18, General control device	No	Flares will not be used to comply with the emission limits.

## Table 2 to Subpart OOO—Stack Emission Limits for Affected Facilities With Capture Systems

Table 2 to Subpart OOO—Stack Emission Limits for Affected Facilities With Capture Systems

	operator	And the owner or operator	The owner or operator must
For * * *	must meet a	must meet an	demonstrate

<sup>(</sup>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.

<sup>(</sup>k) Notifications and reports required under this subpart and under subpart A of this part to demonstrate compliance with this subpart need only to be sent to the EPA Region or the State which has been delegated authority according to §60.4(b).

	PM limit of	opacity limit of	compliance with these limits by conducting * * *
Affected facilities (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	0.05 g/dscm (0.022 gr/dscf) <sup>a</sup>	1	An initial performance test according to §60.8 of this part and §60.675 of this subpart; and Monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e).
Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	0.032 g/dscm (0.014 gr/dscf) <sup>a</sup>	control devices on individual	An initial performance test according to §60.8 of this part and §60.675 of this subpart; and Monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e); and
			Monitoring of baghouses according to §60.674(c), (d), or (e) and §60.676(b).

<sup>\*</sup>Exceptions to the PM limit apply for individual enclosed storage bins and other equipment. See §60.672(d) through (f).

Table 3 to Subpart OOO—Fugitive Emission Limits

Table 3 to Subpart OOO—Fugitive Emission Limits

<sup>&</sup>lt;sup>b</sup>The stack opacity limit and associated opacity testing requirements do not apply for affected facilities using wet scrubbers.

	transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility (as defined in §§60.670 and 60.671) * * *	which a capture system is not used * * *	
Affected facilities (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	10 percent opacity	15 percent opacity	An initial performance test according to §60.11 of this part and §60.675 of this subpart.
Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	7 percent opacity	12 percent opacity	An initial performance test according to §60.11 of this part and §60.675 of this subpart; and Periodic inspections of water sprays according to §60.674(b) and §60.676(b); and
			A repeat performance test according to §60.11 of this part and §60.675 of this subpart within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays.  Affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in §60.674(b) and §60.676(b)

		are exempt from this 5-year
		repeat testing requirement.

## **CERTIFICATE OF SERVICE**

I, Pam Owen, hereby certify that a copy of this permit has been mailed by first cl	ass mail to
Unimin Corporation, P.O. Box 29, Guion, AR, 72540-0029, on this	1 day
of January 2011.	
For Owen	
Pam Owen A AII Air Division	