

September 16, 2008

Mike Snyder, Process Engineer Saint Gobain Proppants 5300 Gerber Road Fort Smith, AR 72904-1699

Dear Mr. Snyder:

The enclosed Permit No. 0492-AOP-R6 is issued pursuant to the Arkansas Operating Permit Program, Regulation # 26.

After considering the facts and requirements of A.C.A. §8-4-101 et seq., and implementing regulations, I have determined that Permit No. 0492-AOP-R6 for the construction, operation and maintenance of an air pollution control system for Saint Gobain Proppants to be issued and effective on the date specified in the permit, unless a Commission review has been properly requested under §2.1.14 of Regulation No. 8, Arkansas Department of Pollution Control & Ecology Commission's Administrative Procedures, within thirty (30) days after service of this decision.

All persons submitting written comments during this thirty (30) day period, and all other persons entitled to do so, may request an adjudicatory hearing and Commission review on whether the decision of the Director should be reversed or modified. Such a request shall be in the form and manner required by §2.1.14 of Regulation No. 8.

Sincerely,

Mike Bates Chief, Air Division

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ADEQ OPERATING AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation 26:

Permit No. : 0492-AOP-R6 IS ISSUED TO:

Saint-Gobain Proppants 5300 Gerber Road Fort Smith, AR 72904 Sebastian County AFIN: 66-00219

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

August 5, 2008

AND

August 5, 2013

THE PERMITTEE IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Mike Bates Chief, Air Division

September 16, 2008

Date Modified

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List of Acronyms and Abbreviations

| A.C.A. | Arkansas Code Annotated |
|-----------------|---|
| AFIN | ADEQ Facility Identification Number |
| CFR | Code of Federal Regulations |
| CO | Carbon Monoxide |
| HAP | Hazardous Air Pollutant |
| lb/hr | Pound Per Hour |
| MVAC | Motor Vehicle Air Conditioner |
| No. | Number |
| NO _x | Nitrogen Oxide |
| PM | Particulate Matter |
| PM_{10} | Particulate Matter Smaller Than Ten Microns |
| SNAP | Significant New Alternatives Program (SNAP) |
| SO_2 | Sulfur Dioxide |
| SSM | Startup, Shutdown, and Malfunction Plan |
| Тру | Tons Per Year |
| UTM | Universal Transverse Mercator |
| VOC | Volatile Organic Compound |
| | |

SECTION I: FACILITY INFORMATION

| PERMITTEE: | Saint-Gobain Proppants |
|----------------------|--|
| AFIN: | 66-00219 |
| PERMIT NUMBER: | 0492-AOP-R6 |
| FACILITY ADDRESS: | 5300 Gerber Road Fort Smith, AR 72904-1699 |
| MAILING ADDRESS: | 5300 Gerber Road Fort Smith, AR 72904-169 |
| COUNTY: | Sebastian |
| CONTACT POSITION: | General Manager – Tom Duncan Process Engineer – Richard Lee |
| TELEPHONE NUMBER: | (479)782-2001 |
| FAX NUMBER: | (479)782-9984 |
| REVIEWING ENGINEER: | Derrick Brown |
| UTM North South (Y): | Zone 15: 3920.56 km N |
| UTM East West (X): | Zone 15: 374.26 km E |

SECTION II: INTRODUCTION

Summary of Permit Activity

Saint-Gobain Proppants (66-00219) owns and operates a facility located at 5300 Gerber Road in Fort Smith which manufactures proppants. Proppants are small, sintered, high density spherical grains in size from approximately 12 U.S. mesh to 70 U.S. mesh. The product is normally used in the fracturing of oil and gas wells. This minor permit modification will replace a baghouse (SN-38), install additional ductwork and pickup points to supplement the dust collection system for SN-38 and SN-39, and increase the annual throughput for SN-38 to 31,200 tons per year. This minor permit modification will increase annual PM and PM_{10} emissions by 0.1 tons per year to 245.25 tons.

Process Description

Proppants are small sintered spherical grains ranging in size from approximately 12 U.S. mesh to 70 U.S. mesh. These sintered spheres are used in the oil and gas well industry to increase the well's flow rate. During the fracturing process, proppants are suspended in a viscous gel and injected into the rock formation. When the pressure created during the fracturing process is released, the proppants prevent the newly created formation fractures from closing, thus maximizing gas or oil recovery.

Plant #1

Ore is received at the ore unloading station and conveyed into a covered storage room. The ore is then transported to feed tanks for milling. Dust from the unloading and transport are captured by fabric filter baghouses SN-02 and SN-01. The ore is then ground to a very fine powder in continuous feed ball mills. The milled ore is captured by baghouses SN-03 and SN-11.

Finely milled ore is pelletized using high-intensity batch mixers. There are two 'forming' lines that combine water, a cornstarch binder and trace minerals to form the spherical pellets. The pellets are then dried in gas-fired dryers. Dust generated from the forming and drying processes are controlled by baghouses SN-05, SN-09 and SN-13. The dried pellets are then screened to the proper size. Oversize and undersize pellets are reintroduced into mixing process for repelletizing. The properly sized pellets are stored in a holding tank to await the sintering process. Dust from the screening and transport of the 'green' pellets are controlled by baghouse SN-07.

The pellets are then fed into one of two rotary kilns that sinter the material at a very high temperature. The kilns discharge their material into a rotary cooler that returns the material to an ambient temperature. Emissions from the sintering and cooling processes are collected at baghouses SN-04, SN-10 and SN-12.

The sintered pellets are then re-screened into various sizes and to remove oversize/undersize material. The finished material is held in bulk storage tanks where it can be bagged, or bulk loaded into trucks or rail-cars. Dust from the loading processes is captured by baghouse SN-08.

Plant #2

Ore is received at an unloading station and transported into one of two concrete silos for storage. Ore is then transported from the silos into the plant for size reduction in a continuous fed ball mill. Dust from the unloading and transport of the ore is captured by baghouses SN-18, SN-19 and SN-20. The milled material is captured by baghouse filters SN-21A and SN-21B.

There are three forming lines in Plant #2. Milled material is formed into pellets by combining milled ore, water and cornstarch binder in a high-intensity batch mixer. The material is discharged from each mixer into a gas-fired dryer. Dust from the dryers is captured by baghouses SN-26, SN-27 and SN-57. The dried pellets are then screened to remove over and under sized material. Off-size material is transported back to the mixer for re-forming. Dust from the transport of green-ware is captured by baghouses SN-28, SN-39 and SN-44 through SN-47.

The properly sized pellets are then sintered in a continuously fed rotary kiln and discharged into a rotary cooler. Dust from the sintering and cooling process is collected using fabric filter baghouses that discharge through SN-29. The sintered material is resized into various sizes and pneumatically transported into finish tanks to await final shipping. Dust from the sizing and transport systems are collected using baghouses SN-31, SN-32 and SN-33. The stored material can be loaded into trucks or pneumatically conveyed into tanks used to load railcars. Dust from truck loading and the pneumatic conveyance is collected by baghouses SN-34 and SN-38.

All kilns and dryers normally combust pipeline quality natural gas for heat. Saint Gobain Proppants is also permitted to operate these sources on low-sulfur diesel fuel. Fuel for the kilns and dryers is stored in two above ground storage tanks located on the property.

Regulations

The following table contains the regulations applicable to this permit.

| Regulations |
|--|
| Arkansas Air Pollution Control Code, Regulation 18, effective February 15, 1999 |
| Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective October 15, 2007 |
| Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective September 26, 2002 |
| 40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants – [SN-18, SN-19, SN-20, SN-21, SN-22, SN-23, SN-25, SN-28, SN- 29, SN-31, SN-34, SN-38, SN-39, SN-45, SN-46, SN-47, SN-48, SN-50, SN-51, SN-52, SN-53, SN-54, SN-56, SN-57, SN-58, SN-59, SN-60, SN-61, and SN-66] |

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

Emission Summary

| | EMISSION SUMMARY | | | | | |
|---------------------------|------------------|-----------------|---------|----------|--|--|
| Source | Description | Pollutant | Emissio | on Rates | | |
| Number | Description | Pollutant | lb/hr | tpy | | |
| Total Allowable Emissions | | PM | 71.3 | 242.5 | | |
| | | PM_{10} | 71.3 | 242.5 | | |
| | | SO ₂ | 14.9 | 59.4 | | |
| | | VOC | 1.6 | 6.2 | | |
| | | СО | 23.3 | 92.5 | | |
| | | NO _X | 42.1 | 167.0 | | |

| SN | Description | Pollutant | lb/hr | tpy |
|----------|--|-------------------|-----------------------|--------|
| Facility | Plantwide Combustion Emission Sources | PM | | 30.7 |
| | | PM_{10} | | 30.7 |
| | | SO_2 | and the second second | 59.4 |
| | | VOC | and a strategy and | 6.2 |
| | | CO | | 92.5 |
| | | NO _x | | 167.0 |
| SN-01 | Plant #1 -Ore Conveyor/Crush Tank Filter | PM | 1.1 | 1.7 |
| | | PM ₁₀ | 1.1 | 1.7 |
| SN-02 | Plant #1 - Ore Dump Station Filter | PM | 0.6 | 0.5 |
| | | PM10 | 0.6 | 0.5 |
| SN-03 | Plant #1 Ball Mill Filter | PM | 0.3 | 1.1 |
| | | PM_{10} | 0.3 | 1.1 |
| SN-04 | Plant #1 Kiln Filter | PM | 0.2 | 30.7* |
| | (7.7 MM Btu/hr) | PM ₁₀ | 0.2 | 30.7* |
| | | CO | 0.7 | 92.5* |
| | | NOx | 1.2 | 167.0* |
| | | SO ₂ | 0.4 | 59.4* |
| | | VOC | 0.1 | 6.2* |
| SN-04 | Plant #1 Kiln #1 Filter | PM | 1.0 | 3.7 |
| | | PM ₁₀ | 1.0 | 3.7 |
| SN-05 | Plant #1 Mixers No. 1 through No. 6 | PM | 0.2 | 0.7 |
| | | PM ₁₀ | 0.2 | 0.7 |
| SN-06 | Plant #1 North/South Tank Bin Vents Filter | PM | 0.1 | 0.4 |
| | | PM ₁₀ | 0.1 | 0.4 |
| SN-07 | Plant #1 Screening Kiln Feed Area Filter | PM | 1.7 | 3.4 |
| | | PM ₁₀ | 1.7 | 3.4 |
| SN-08 | Plant #1 Finished Product Loadout Filter | PM | 0.6 | 0.9 |
| | | PM_{10} | 0.6 | 0.9 |
| SN-09 | Plant #1 Dryer #1 | PM | 1.2 | 30.7* |
| | 46 MMBtu/hr | PM ₁₀ | 1.2 | 30.7* |
| | | SO ₂ | 2.5 | 59.4* |
| | | VOC | 0.3 | 6.2* |
| | | CO | 3.9 | 92.5* |
| | | NO _x | 7.0 | 167.0* |
| SN-09 | Plant #1 Dryer No. 1 Filter (process) | PM | 0.5 | 1.9 |
| | | _PM ₁₀ | 0.5 | 1.9 |
| SN-10 | Plant #1 – Kiln No. 2 | PM | 0.5 | 30.7* |
| l | 20 MMBtu/hr | PM ₁₀ | 0.5 | 30.7* |
| | | SO ₂ | 1.1 | 59.4* |
| | | VOC | 0.1 | 6.2* |
| | | CO | 1.7 | 92.5* |
| | | NO _x | 3.0 | 167.0* |

| SN | Description | Pollutant | lb/hr | tpy |
|---------|--|-------------------------|----------|-------|
| SN-10 | Plant #1 Rotary Kiln #2 Filter (process) | PM | 2.8 | 10.4 |
| | | PM ₁₀ | 2.8 | 10.4 |
| SN-11 | Plant #1 Ball Mill Filter | PM | 0.6 | 2.1 |
| | | PM ₁₀ | 0.6 | 2.1 |
| SN-12 | Plant #1 Product Cooler Filter | PM | 3.5 | 12.6 |
| | | PM ₁₀ | 3.5 | 12.6 |
| SN-13 | Plant #1 Dryer No.2 | PM | 1.2 | 30.7* |
| | 46 MMBtu/hr | PM ₁₀ | 1.2 | 30.7* |
| | | SO ₂ | 2.5 | 59.4* |
| | | VOC | 0.3 | 6.2* |
| | | CO | 3.9 | 92.5* |
| | | NO _x | 7.0 | 167.0 |
| SN-13 | Plant #1 Dryer No. 2 Filter (process) | PM | 0.5 | 1.9 |
| | | PM ₁₀ | 0.5 | 1.9 |
| SN-14 | Plant #1 DCF Tank Filter | PM | 0.1 | 0.1 |
| | | PM ₁₀ | 0.1 | 0.1 |
| SN-15 | South Tank Bin Vent | Rerouted to | SN-06 | |
| SN-16 | Plant #1 Ore Transport Mill Area Filter | PM | 0.4 | 1.4 |
| | | PM_{10} | 0.4 | 1.4 |
| SN-17 | Truck Loadout | Rerouted to | SN-08 | |
| SN-18 | Plant No. 2 Ore Truck Unloading Filter | PM | 0.6 | 1.0 |
| | | PM ₁₀ | 0.6 | 1.0 |
| SN-19 | Plant #2 Raw Material Silo Filter | PM | 1.7 | 3.0 |
| | | PM ₁₀ | 1.7 | 3.0 |
| SN-20 | Plant #2 Silo Loadout Filter | PM | 2.2 | 8.0 |
| | | PM ₁₀ | 2.2 | 8.0 |
| SN-21A | Plant #2 Fuller Mill Filter #1 | | <u></u> | |
| | | PM | 1.5 | 6.3 |
| SN-21B | Plant #2 Fuller Mill Filter #2 | PM ₁₀ | 1.5 | 6.3 |
| SN-22 | Plant #2 Mill Feed Tank | PM | 0.2 | 0.6 |
| | | PM10 | 0.2 | 0.6 |
| SN-23 | Plant #2 Supply Feed Tank | PM | 0.1 | 0.2 |
| | | PM ₁₀ | 0.1 | 0.2 |
| SN-24 | Source Removed from permit – 2000 | | <u> </u> | L |
| SN-25 | Plant #2 Binder Storage | PM | 0.2 | 0.1 |
| 51,25 | | PM ₁₀ | 0.2 | 0.1 |
| SN-26 | Plant #2, Dryer No. 1 | PM | 0.6 | 30.7* |
| NI 1 40 | 24.5 MMBTU/hr | PM_{10} | 0.6 | 30.7* |
| | | SO ₂ | 1.3 | 59.4* |
| | | VOC | 0.1 | 6.2* |

| SN | Description | Pollutant | lb/hr | tpy |
|----------|--|--------------------------|------------|--------|
| | | CO | 2.1 | 92.5* |
| | | NO _x | 3.7 | 167.0* |
| SN-26 | Plant No.2, Dryer No. 1 Exhaust Vent | PM | 1.0 | 3.9 |
| 1 | Filter | PM_{10} | 1.0 | 3.9 |
| | (process) | 1 101[0 | 1.0 | |
| SN-27 | Plant #2, Dryer No. 2 | PM | 0.6 | 30.7* |
| | 24.5 MMBTU/hr | PM_{10} | 0.6 | 30.7* |
| | | SO ₂ | 1.3 | 59.4* |
| | | VOC | 0.1 | 6.2* |
| | | CO | 2.1 | 92.5* |
| | | NO _x | 3.7 | 167.0* |
| SN-27 | Plant No.2, Dryer No. 2 Exhaust Vent | PM | 1.0 | 3.9 |
| | Filter | PM_{10} | 1.0 | 3.9 |
| | (process) | 1 10110 | 1.0 | 5.9 |
| SN-28 | Forming Area Dust Collection Baghouse | PM | 2.8 | 11.5 |
| | | PM10 | 2.8 | 11.5 |
| SN-29A | Cooler and Kiln Exhaust | PM | 1.5 | 30.7* |
| 2 | 60.0 MMBTU/hr | PM_{10} | 1.5 | 30.7* |
| | | SO ₂ | 3.2 | 59.4* |
| | | voc | 0.3 | 6.2* |
| | | CO | 5.0 | 92.5* |
| | | NOx | 9.1 | 167.0* |
| SN-29 | Plant #2 Cooler and Kiln Exhaust Filters | PM | 15.0 | 43.5 |
| SN-29B | | PM ₁₀ | 15.0 | 43.5 |
| SN-31 | Plant #2 Fired Screening Filter | PM | 0.2 | 0.4 |
| | | PM ₁₀ | 0.2 | 0.4 |
| SN-32 / | Finished Product Loadout Tanks Filter | PM | 0.4 | 0.6 |
| SN-33 | | PM ₁₀ | 0.4 | 0.6 |
| SN-34 | Shipping Area Vent (Truck | PM | 0.2 | 0.2 |
| | Loadout)/Deduster Filter | PM ₁₀ | 0.2 | 0.2 |
| SN-35 | Diesel Fuel Storage Tank | Insignificar | t Activity | |
| SN-36 | Diesel Fuel Storage Tank | Insignificant Activity | | |
| SN-37 | Source removed from the permit – 1998 | ▲ <u>,</u> ,,,,,,,,,,,,, | | |
| SN-38 | Plant to Plant Finished Product Conveyor | PM | 0.2 | 0.3 |
| SN-49 | Filter | PM ₁₀ | 0.2 | 0.3 |
| SN-39 | 350 Baghouse | PM | 0.8 | 3.2 |
| | | PM ₁₀ | 0.8 | 3.2 |
| SN-40 | Plant #1 Side #1 R/W Blower | PM | 0.2 | 0.5 |
| 014-40 | | PM_{10} | 0.2 | 0.5 |

| SN | Description | Pollutant | lb/hr | tpy |
|-----------------|---|------------------------|-------|--------|
| SN-41 | Plant #1 Side #2 R/W Blower | PM | 0.2 | 0.5 |
| | | PM ₁₀ | 0.2 | 0.5 |
| SN-42 | Plant #1 DCF Blower | PM | 0.1 | 0.1 |
| | | PM ₁₀ | 0.1 | 0.1 |
| SN-43 | Plant #2 R/W Blower | PM | 0.3 | 1.0 |
| | | PM ₁₀ | 0.3 | 1.0 |
| SN-44 | Plant #2 R/W Blower | PM | 0.3 | 1.0 |
| . <u></u> | | PM ₁₀ | 0.3 | 1.0 |
| SN-45 | 340 Baghouse | PM | 0.8 | 3.2 |
| | | PM10 | 0.8 | 3.2 |
| SN-46 | 360 Baghouse | PM | 0.8 | 3.2 |
| | | PM ₁₀ | 0.8 | 3.2 |
| SN-47 | 370 Baghouse | PM | 0.8 | 3.2 |
| | Ű | PM ₁₀ | 0.8 | 3.2 |
| SN-48 | Equipment never installed | | | L |
| SN-50 | Plant No. 2 Mill Conveyer Filter | PM | 0.3 | 1.0 |
| 011-50 | | PM_{10} | 0.3 | 1.0 |
| SN-51 | Factory Wide Fugitives | PM | 3.5 | 20.0 |
| 21N-21 | ractory while rughtves | PM_{10} | 3.5 | 20.0 |
| C) 1 50 | | 1 10110 | 5.5 | 20.0 |
| SN-52 | Equipment never installed. | | | |
| SN-53 | Plant #2 Ball Mill Area – DC 221 Filter | PM | 1.9 | 8.1 |
| | | PM ₁₀ | 1.9 | 8.1 |
| SN-54 | Plant #2 400 Area – DC 440 Filter | PM | 1.9 | 7.7 |
| | | PM ₁₀ | 1.9 | 7.7 |
| SN-55 | Plant #1 Bin Vent Mixer 6 – Baghouse | PM | 0.1 | 0.5 |
| | | PM ₁₀ | 0.1 | 0.5 |
| SN-56 | Line #3 Mixing Area Baghouse | PM | 1.8 | 6.2 |
| 011 00 | | PM_{10} | 1.8 | 6.2 |
| SN-57 | Line #3 Dryer Area Baghouse | PM | 3.3 | 11.9 |
| 51 N- 57 | (process) | PM_{10} | 3.3 | 11.9 |
| CNT 57 | | PM | 1.4 | 30.7* |
| SN-57 | Line #3 Dryer (combustion) | PM PM_{10} | 1.4 | 30.7* |
| | 56 MMBtu/hr | SO_2 | 3.0 | 59.4* |
| | | VOC | 0.3 | 6.2* |
| | | CO | 4.7 | 92.5* |
| | | NOx | 8.5 | 167.0* |
| CNI 50 | Line #2 Server Area Dachause | PM | 2.6 | 9.2 |
| SN-58 | Line #3 Screen Area Baghouse | PM PM ₁₀ | 2.6 | 9.2 |
| | | 1 10110 | 2.0 | 7.4 |

| SN | Description | Pollutant lb/hr | | tpy | |
|-------|--|------------------------|--|------------|------------|
| SN-59 | Line #3 Milled Feed Vessel Filter | Insignificant Activity | | | |
| SN-60 | Line #3 Binder Feed Vessel Filter | Insignificant Activity | | | |
| SN-61 | Line #3 Rework Feed Vessel Filter | PM | | | |
| SN-62 | Line #3 Pneumatic Conveyance | PM | | 1.2 1.2 | 1.9 1.9 |
| SN-63 | Line #3 Pneumatic Conveyance | 10 | | | |
| SN-64 | Binder Storage Vessel Vent Filter | PM PM 10 | | 0.6 0.6 | 2.7 2.7 |
| SN-65 | Iron Ore Storage Vessel Vent Filter | PM PM 10 | | 0.1 0.1 | 0.1 0.1 |
| SN-66 | Plant-To-Plant Pneumatic Finished Product Conveyor Filter | PM PM 10 | | 0.3 0.3 | 0.3 0.3 |

*Plantwide limit for sources firing either natural gas or low sulfur diesel fuel.

SECTION III: PERMIT HISTORY

492-A was issued to Norton Company on May 26, 1978. 492-A permitted Norton to construct and operate a sintered aluminum oxide manufacturing plant at the present location with an annual production capacity of 20,000 tons per year.

492-AR-1 was issued to the Norton Company on May 22, 1981. 492-AR-1 permitted the installation and operation of a new sintering kiln (SN-10), a new ball mill (SN-11), mixing and sizing equipment (SN-16), and a product cooler system.

492-AR-2 was issued to the Norton Company on January 22, 1982. 492-AR-2 permitted the installation and operation of a new dryer (SN-13) with associated baghouse.

492-AR-3 was issued to Norton-Alcoa Proppants on July 24, 1985. 492-AR-3 permitted the construction and operation of new expanded facilities (SN-18 through SN-34). The permit also recognized the facility's name change from Norton Company to Norton-Alcoa Proppants.

492-AR-4 was issued to Norton-Alcoa Proppants on September 30, 1998 to reclassify the facility as a synthetic minor with annual PM_{10} emissions of 91.3 tons per year. The permit also included two previously unlisted sources, the railcar loadout (SN-08), and the truck loadout (SN-17). The permit also includes the plant to plant pneumatic conveyor (SN-38) as a new source.

492-AR-5 was issued to Norton-Alcoa Proppants on September 30, 1999. The permit was issued to allow the installation of a back up bucket elevator which increased the operating efficiency of the facility, but with no increase in emissions. A new baghouse (SN-39) was added with this permit modification. Several sources were also listed for the first time as being subject to 40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants.

492-AR-6 was issued to Norton Alcoa Proppants on February 16, 2000. The permit was issued to allow the manufacture of an alternate product at the facility. Permit limits were: PM - 135.7 tpy, PM_{10} - 91.3 tpy, SO_2 - 0.8 tpy, VOC - 25.0 tpy, CO - 18.8 tpy, NO_x - 75.1 tpy, Formaldehyde - 4.61 tpy, Ethylene Glycol - 7.86 tpy, and Phenol 9.40 tpy.

An administrative amendment was issued to the above permit on March 10, 2000. It was determined during testing for the above permit that SN-24 did not vent to atmosphere and was not an emission source. Its emission limits were removed from the permit. Permit limits were: PM - 134.4 tpy, PM_{10} - 90.1 tpy, SO_2 - 0.8 tpy, VOC - 25.0 tpy, CO - 18.8 tpy, NO_x - 75.1 tpy, Formaldehyde - 4.61 tpy, Ethylene Glycol - 7.86 tpy, and Phenol 9.40 tpy.

492-AR-7 was issued to Norton Alcoa Proppants on July 12, 2000. The permit was issued to allow the manufacture to revise cycle times to increase throughput. Permit limits were: PM - 139.8 tpy, PM_{10} - 94.3 tpy, SO_2 - 0.8 tpy, VOC - 25.0 tpy, CO - 18.8 tpy, NO_x - 75.1 tpy, Formaldehyde - 4.61 tpy, Ethylene Glycol - 7.86 tpy, and Phenol 9.40 tpy.

492-AR-8 was issued to Norton Alcoa Proppants on September 15, 2001. The permit was issued to allow seven minor changes to the previous permit. The primary changes were to allow diesel fuel as a fully permitted fuel and to remove the HAPS containing materials from the process. Permit limits were: PM - 144.9 tpy, PM_{10} - 95.3 tpy, SO_2 - 90.0 tpy, VOC - 3.6 tpy, CO - 54.2 tpy, and NO_x - 98.5 tpy.

492-AOP-R0 was issued to Norton Proppants, Inc. on August 5, 2002. The permit allowed several changes to the previous permit including recalculating several of the emission sources. Permit limits were: PM - 178.1 tpy, $PM_{10} - 178.1 \text{ tpy}$, $SO_2 - 90.0 \text{ tpy}$, VOC - 5.6 tpy, CO - 84.2 tpy, and $NO_x - 153.1 \text{ tpy}$.

Permit No. 0492-AOP-R1 was issued to Norton Proppants, a Division of Saint-Gobain Ceramics and Plastics on November 27, 2003. This modification was issued to allow several minor process changes. Permit limits were: PM - 208.5 tpy, $PM_{10} - 208.5 \text{ tpy}$, $SO_2 - 90.0 \text{ tpy}$, VOC - 5.6 tpy, CO - 84.2 tpy, and NO_x - 153.1 tpy.

Permit No. 0492-AOP-R2 was issued to Norton Proppants, a Division of Saint-Gobain Ceramics and Plastics on July 13, 2004. This modification was issued to allow the installation of a third forming line. Permit limits were: PM - 235.2 tpy, $PM_{10} - 235.2 \text{ tpy}$, $SO_2 - 90.0 \text{ tpy}$, VOC - 7.1 tpy, CO - 105.2 tpy, and $NO_x - 191.0 \text{ tpy}$.

Permit No. 0492-AOP-R3 was issued to Saint-Gobain Proppants on November 18, 2004. Two pneumatic conveyances (SN-62 & SN-63) are added to the permit on this modification. Permit limits were: PM - 235.5 tpy, $PM_{10} - 235.5 \text{ tpy}$, $SO_2 - 90.0 \text{ tpy}$, VOC - 7.1 tpy, CO - 105.2 tpy, and $NO_x - 153.1 \text{ tpy}$.

Permit No. 0492-AOP-R4 was issued April 7, 2007. This permit modification allowed the facility to add 3 small new sources to the facility. A binder tank vent filter (SN-64), an iron ore tank vent filter (SN-66) and a dust collector for a plant-to-plant conveyance (SN-66) will be added to the facility. Several other changes will be made to existing sources. A supplemental dust collector will be added at the Plant #2 Kiln/cooler so it will then be controlled by 2 dust collectors. Two baghouses will be improved or replaced (SN-09 & SN-11). Two sources will be removed from the permit (SN-48 & SN-52) which were never installed. Two sources (SN-59 & SN-60) will be moved to the Insignificant Activities List since they vent inside the building. Three sources (SN-61, SN-62 & SN-63) will be combined to exhaust through a single stack.

Permit No. 0492-AOP-R5 was issued February 21, 2008. Issuance of this permit was prompted by the submittal of the facility's renewal Title V air permit application. Included in the renewal was the removal of SN-64 and SN-65 as affected sources for 40 CFR Part 60, Subpart OOO. Basis for the removal of these sources from the affected source list was because SN-64 is a bulk storage tank for cornstarch and SN-65 is a bulk storage tank for iron ore (hematite). An affected facility storage bin is defined as a facility for storage of nonmetallic minerals prior to further processing or loading. Cornstarch and hematite are not defined as nonmetallic minerals by 40 CFR Part 60, Subpart OOO. Also included is the installation of a new baghouse (Plant #2 Fuller Mill filter #2).

SECTION IV: SPECIFIC CONDITIONS

SN-04, SN-09, SN-10, SN-13, SN-26, SN-27, SN-29 and SN-57 Combustion Sources

Source Description

There are three kilns (SN-04, SN-10, and SN-29) and five dryers (SN-09, SN-13, SN-26, SN-27 and SN-57) that are the fired equipment operating in the process at the facility. Each source is permitted for full time operation at maximum capacity on either natural gas or low sulfur diesel fuel. The emission limits are based on using the fuel which causes the highest emissions of that pollutant.

Specific Conditions

 The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition is demonstrated by each source being permitted at its maximum capacity and full time operation on the fuel which causes the highest emissions of that pollutant. [§19.501 et seq of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation #19) effective October 15, 2007 and 40 CFR Part 52, Subpart E]

| SN | Description | Pollutant | lb/hr | tpy |
|----|--|------------------|-------|--------|
| | | PM ₁₀ | 0.2 | 30.7* |
| | Kiln No. 1 | SO ₂ | 0.4 | 59.4* |
| 04 | 7.7 MMBtu/hr | VOC | 0.1 | 6.2* |
| | /./ MIVIBLU/III | CO | 0.7 | 92.5* |
| | | NO _x | 1.2 | 167.0* |
| | | PM ₁₀ | 1.2 | |
| | Plant No. 1 Draw No. 1 | SO ₂ | 2.5 | |
| 09 | Plant No. 1, Dryer No. 1 46.0 MM Btu/hr | VOC | 0.3 | |
| | 40.0 Milli Btu/III | CO | 3.9 | |
| | | NO _x | 7.0 | |
| | | PM ₁₀ | 0.5 | |
| | Rotary Kiln No. 2, Plant No. 1 | SO ₂ | 1.1 | |
| 10 | 20 MM Btu/hr | VOC | 0.1 | |
| | | CO | 1.7 | |
| | | NO _x | 3.0 | |
| | | PM ₁₀ | 1.2 | |
| | Diant No. 1 During No. 2 | SO ₂ | 2.5 | |
| 13 | Plant No. 1, Dryer No. 2 46.0 MM Btu/hr | VOC | 0.3 | |
| | | CO | 3.9 | |
| | | NO _x | 7.0 | |
| | Plant No. 2. Driver No. 1 | PM ₁₀ | 0.6 | |
| 26 | Plant No. 2, Dryer No. 1 | SO ₂ | 1.3 | |
| | 24.5 MM Btu/hr | VOC | 0.1 | |

| SN | Description | Pollutant | lb/hr | tpy |
|----|--|------------------|-------|-----|
| | | СО | 2.1 | |
| | | NOx | 3.7 | |
| | | PM ₁₀ | 0.6 | |
| | Diant Na. 2. Drawn No. 2 | SO ₂ | 1.3 | |
| 27 | Plant No. 2, Dryer No. 2 24.5 MM Btu/hr | VOC | 0.1 | |
| | | CO | 2.1 | |
| | | NO _x | 3.7 | |
| | | PM ₁₀ | 1.5 | |
| | Diant No. 2 Kiln and Cooler | SO ₂ | 3.2 | |
| 29 | Plant No. 2, Kiln and Cooler | VOC | 0.3 | |
| | 60.0 MM Btu/hr | CO | 5.0 | |
| | | NO _x | 9.1 | |
| | | PM ₁₀ | 1.4 | |
| | | SO ₂ | 3.0 | |
| 57 | Line #3 Dryer | VOC | 0.3 | |
| | 56.0 MM Btu/hr | СО | 4.7 | |
| | | NOx | 8.5 | |

*Plantwide limit for the pollutant listed firing either natural gas or low sulfur diesel fuel.

2. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition is demonstrated by each source being permitted at its maximum capacity and full time operation on the fuel which causes the highest emissions of that pollutant. [§18.801 of the Arkansas Air Pollution Control Code (Regulation #18) effective February 15, 1999, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

| SN | Description | Pollutant | lb/hr | tpy |
|----|--|-----------|-------|---|
| 04 | Kiln No. 1 7.7 MMBtu/hr | РМ | 0.2 | 30.7* 59.4* 6.2* 92.5* 167.0* |
| 09 | Plant No. 1, Dryer No. 1 46.0 MM Btu/hr | РМ | 1.2 | |
| 10 | Rotary Kiln No. 2, Plant No. 1 20 MM Btu/hr | РМ | 0.5 | |
| 13 | Plant No. 1, Dryer No. 2 46.0 MM Btu/hr | PM | 1.2 | |
| 26 | Plant No. 2, Dryer No. 1 24.5 MM Btu/hr | РМ | 0.6 | |
| 27 | Plant No. 2, Dryer No. 2 24.5 MM Btu/hr | PM | 0.6 | |
| 29 | Plant No. 2, Kiln and Cooler | PM | 1.5 | |

| SN | Description | Pollutant | lb/hr | tpy |
|----|---------------------------------|-----------|-------|-----|
| | 60.0 MM Btu/hr | | | |
| 57 | Line #3 Dryer 56.0 MM Btu/hr | PM | 1.4 | |

- 3. The combustion sources may only be fired with pipeline quality natural gas or low sulfur diesel fuel. Low sulfur diesel fuel must have a sulfur content of no more than 0.05 weight percent sulfur. [§19.705 of Regulation #19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
- 4. The permittee shall maintain records of the sulfur content of all shipments of diesel fuel received at the facility. These records shall be maintained on site and made available to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
- 5. Visible emissions from the Combustion Sources shall not exceed 5% when firing natural gas and 20% when firing low sulfur diesel fuel as measured by EPA Method 9. [§18.501 of Regulation #18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 6. The permittee will conduct daily observations of opacity from source No.'s 04, 09, 10, 13, 26, 27, 29 and 57 when burning low sulfur diesel and keep a record of these observations. If the permittee detects visible emissions in excess of 20%, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the orrective action taken. The permittee must keep the records onsite and make the records available to Department personnel upon request. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]

SN-01 through SN-14, SN-16, SN-18 through SN-23, SN-25 through SN-34, SN-38, SN-39, SN-45 through SN-55, SN-56 through SN-61 Particulate Sources

Source Description

Saint-Gobain Proppants operates a facility with three manufacturing trains which produce proppants used in completions of oil and gas wells. A more complete description of the service for each source is contained in the process description at the beginning of this permit.

Specific Conditions

7. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition is demonstrated by the sources lb/hr limits being based on maximum capacity and the tpy limits are based on the throughput limits in Specific Condition No. 10. [§19.501 et seq of Regulation 19 and 40 CFR Part 52, Subpart E]

| SN | Description | Pollutant | lb/hr | tpy |
|-------|--|-------------------------------------|-------------|-----------|
| SN-01 | Plant #1 Ore Conveyor/Crush Tank Filter | PM ₁₀ | 1.1 | 1.7 |
| SN-02 | Plant #1 Ore Dump Station Filter | PM ₁₀ | 0.6 | 0.5 |
| SN-03 | Plant #1 Ball Mill No. 1 Filter | PM ₁₀ | 0.3 | 1.1 |
| SN-04 | Plant #1 Kiln No. 1 Filter (Process) | PM ₁₀ | 1.0 | 3.7 |
| SN-05 | Plant #1 Mixers No. 1 through No. 6 Filter | PM ₁₀ | 0.2 | 0.7 |
| SN-06 | Plant #1North/South Tank Bin Vents Filter | PM ₁₀ | 0.1 | 0.4 |
| SN-07 | Plant #1 Screening/Kiln Feed Area Filter | PM ₁₀ | 1.7 | 3.4 |
| SN-08 | Plant #1 Finished Product Loadout Filter | PM ₁₀ | 0.6 | 0.9 |
| SN-09 | Plant #1, Dryer No. 1 Filter (process) | PM ₁₀ | 0.5 | 1.9 |
| SN-10 | Plant #1 Rotary Kiln No. 2 Filter (process) | PM ₁₀ SO ₂ | 2.8 60.0 | 10.4 * |
| SN-11 | Plant #1Ball Mill Filter | PM ₁₀ | 0.6 | 2.1 |
| SN-12 | Plant #1 Product Cooler Filter | PM ₁₀ | 3.5 | 12.6 |
| SN-13 | Plant #1, Dryer No.2 Filter (process) | PM ₁₀ | 0.5 | 1.9 |
| SN-14 | Plant #1 DCF Tank Filter | PM ₁₀ | 0.1 | 0.1 |
| SN-15 | South Tank Bin Vent | Rerout | ed to SN | -06 |
| SN-16 | Plant #1 Ore Transport Mill Area Filter | PM ₁₀ | 0.4 | 1.4 |
| SN-17 | Truck Loadout | Rerout | ted to SN | -08 |
| SN-18 | Plant #2 Ore Truck Unloading Filter | PM ₁₀ | 0.6 | 1.0 |

| SN | Description | Pollutant | lb/hr | tpy |
|------------------|--|------------------|-----------|--------|
| SN-19 | Plant #2 Raw Material Silo Transport Filter | PM ₁₀ | 1.5 | 6.3 |
| SN-20 | Plant #2 Silo Loadout Filter | PM10 | 1.5 | 8.0 |
| SN-21A | Plant #2 Fuller Ball Mill Filter #1 | PM ₁₀ | 1.5 | 6.3 |
| SN-21B | Plant #2 Fuller Ball Mill Filter #2 | | | |
| SN-22 | Plant #2 Ball Mill Feed Vessel Vent Filter | PM ₁₀ | 0.2 | 0.6 |
| SN-23 | Plant #2 Ball Mill Feed Vent No.2 Filter | PM10 | 0.1 | 0.2 |
| SN-24 | Source Removed from per | mit - 2000 | | |
| SN-25 | Plant #2 Binder Storage Vessel Vent Filter | PM ₁₀ | 0.2 | 0.1 |
| SN-26 | Plant #2, Dryer No. 1 Exhaust Vent Filter (process) | PM ₁₀ | 1.0 | 3.9 |
| SN-27 | Plant #2, Dryer No. 2 Exhaust Vent Filter (process) | PM ₁₀ | 1.0 | 3.9 |
| SN-28 | Forming Area Dust Collection Baghouse | PM ₁₀ | 2.8 | 11.5 |
| SN-29 | Plant #2 Cooler and Kiln Exhaust Filters | PM ₁₀ | 15.0 | 43.5 |
| SN-31 | Plant #2 Sizing Area Vent/Fired Screening Filter | PM ₁₀ | 0.2 | 0.4 |
| SN-32/ SN-33 | Plant #2 Finished Product Loadout Tanks Filter | PM10 | 0.4 | 0.6 |
| SN-34 | Plant #2 Shipping Area Vent (Truck Loadout)/Deduster Filter | PM ₁₀ | 0.2 | 0.2 |
| SN-35 | Diesel Fuel Storage Tank | Insignif | icant Act | tivity |
| SN-36 | Diesel Fuel Storage Tank | Insignif | icant Act | ivity |
| SN-37 | Source removed from per | mit - 1998 | | |
| SN-38 & SN-49 | Plant to Plant Finished Product Conveyor Filter & Cleaning Booth/SN-04 Backup Filter | PM ₁₀ | 0.2 | 0.3 |
| SN-39 | 350 Baghouse | PM ₁₀ | 0.8 | 3.2 |
| SN-40 | Plant #1 Side #1 R/W Blower | PM ₁₀ | 0.2 | 0.5 |
| SN-41 | Plant #1 Side #2 R/W Blower | PM ₁₀ | 0.2 | 0.5 |
| SN-42 | Plant #1 DCF Blower | PM ₁₀ | 0.1 | 0.1 |
| SN-43 | Plant #2 R/W Blower | PM ₁₀ | 0.3 | 1.0 |
| SN-44 | Plant #2 R/W Blower | PM ₁₀ | 0.3 | 1.0 |
| SN-45 | 340 Baghouse | PM ₁₀ | 0.8 | 3.2 |
| SN-46 | 360 Baghouse | PM ₁₀ | 1.9 | 8.1 |
| SN-47 | 370 Baghouse | PM ₁₀ | 0.8 | 3.2 |

| SN | Description | Pollutant | lb/hr | tpy |
|-------|---|------------------|-----------|--------|
| SN-48 | This equipment was not i | nstalled. | | |
| SN-50 | Plant No. 2 Mill Conveyer Filter | PM ₁₀ | 0.3 | 1.0 |
| SN-51 | Non-point Source Emissions | PM ₁₀ | 3.5 | 20.0 |
| SN-52 | This equipment was not i | installed. | | |
| SN-53 | Plant #2 Ball Mill Area – DC 221 Filter | PM ₁₀ | 1.9 | 8.1 |
| SN-54 | Plant #2 400 Area – DC 440 Filter | PM ₁₀ | 1.9 | 8.1 |
| SN-55 | Plant #1 Bin Vent Mixer 6 – Baghouse | PM ₁₀ | 0.1 | 0.5 |
| SN-56 | Line #3 Mixing Area Baghouse | PM ₁₀ | 1.8 | 6.2 |
| SN-57 | Line #3 Dryer Area Baghouse | PM ₁₀ | 3.3 | 11.9 |
| | (process) | | | |
| SN-58 | Line #3 Screen Area Baghouse | PM ₁₀ | 2.6 | 9.2 |
| SN-59 | Line #3 Milled Feed Vessel Filter | Insignif | icant Act | ivity |
| SN-60 | Line #3 Binder Feed Vessel Filter | Insignif | icant Act | tivity |
| SN-61 | Line #3 Rework Feed Vessel Filter | PM ₁₀ | 1.2 | 1.9 |
| SN-62 | Line #3 Pneumatic Conveyance | | | |
| SN-63 | Line #3 Pneumatic Conveyance | | | |
| SN-64 | Binder Storage Vessel Vent Filter | PM ₁₀ | 0.6 | 2.7 |
| SN-65 | Iron Ore Storage Vessel Vent Filter | PM ₁₀ | 0.1 | 0.1 |
| SN-66 | Plant-to-Plant Pneumatic Finished Product | PM ₁₀ | 0.3 | 0.3 |
| | Conveyance | | | |

*See Specific Condition No. 12 for Plantwide sulfur dioxide yearly limit.

8. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition is demonstrated by the sources lb/hr limits being based on maximum capacity and the tpy limits are based on the throughput limits in Specific Condition No. 10. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

| SN | Description | Pollutant | lb/hr | tpy |
|--------|--|-----------|------------|------|
| SN-01 | Plant #1 Ore Conveyor/Crush Tank Filter | PM | 1.1 | 1.7 |
| SN-02 | Plant #1 Ore Dump Station Filter | PM | 0.6 | 0.5 |
| SN-03 | Plant #1 Ball Mill No. 1 Filter | PM | 0.3 | 1.1 |
| SN-04 | Plant #1 Kiln No. 1 Filter (Process) | PM | 1.0 | 3.7 |
| SN-05 | Plant #1 Mixers No. 1 through No. 6 Filter | PM | 0.2 | 0.7 |
| SN-06 | Plant #1 North/South Tank Bin Vents Filter | РМ | 0.1 | 0.4 |
| SN-07 | Plant #1 Screening/Kiln Feed Area Filter | PM | 1.7 | 3.4 |
| SN-08 | Plant #1 Finished Product Loadout Filter | PM | 0.6 | 0.9 |
| SN-09 | Plant #1, Dryer No. 1 Filter (process) | PM | 0.5 | 1.9 |
| SN-10 | Plant #1 Rotary Kiln No. 2 Filter (process) | PM | 2.8 | 10.4 |
| SN-11 | Plant #1 Ball Mill No. Filter | PM | 0.6 | 2.1 |
| SN-12 | Plant #1 Product Cooler Filter | PM | 3.5 | 12.6 |
| SN-13 | Plant #1, Dryer No.2 Filter (process) | РМ | 0.5 | 1.9 |
| SN-14 | Plant #1 DCF Tank Filter | PM | 0.1 | 0.1 |
| SN-15 | South Tank Bin Vent | Rerou | ited to SN | -06 |
| SN-16 | Plant #1 Ore Transport Mill Area Filter | PM | 0.4 | 1.4 |
| SN-17 | Truck Loadout PM10 | Rerou | ited to SN | -08 |
| SN-18 | Plant #2 Ore Truck Unloading Filter | PM | 0.6 | 1.0 |
| SN-19 | Plant #2 Raw Material Silo Transport Filter | PM | 1.7 | 3.0 |
| SN-20 | Plant #2 Silo Loadout Filter | PM | 2.2 | 8.0 |
| SN-21A | Plant #2 Fuller Ball Mill Filter #1 | PM | 1.5 | 6.3 |
| SN-21B | Plant #2 Fuller Ball Mill Filter #2 | | | |
| SN-22 | Plant #2 Ball Mill Feed Vessel Vent Filter | PM | 0.2 | 0.6 |
| SN-23 | Plant #2 Ball Mill Feed Vent No.2 Filter | PM | 0.1 | 0.2 |

| SN | Description | Pollutant | lb/hr | tpy |
|------------------|--|-----------------------------------|------------|-------|
| SN-24 | Source Removed from pe | rmit - 2000 | | |
| SN-25 | Plant #2 Binder Storage Vessel Vent Filter | РМ | 0.2 | 0.1 |
| SN-26 | Plant #2, Dryer No. 1 Exhaust Vent Filter (process) | PM | 1.0 | 3.9 |
| SN-27 | Plant #2, Dryer No. 2 Exhaust Vent Filter (process) | PM | 1.0 | 3.9 |
| SN-28 | Forming Area Dust Collection Baghouse | PM | 2.8 | 11.5 |
| SN-29 | Plant #2 Cooler and Kiln Exhaust Filters | PM | 15.0 | 43.5 |
| SN-31 | Plant #2 Sizing Area Vent/Fired Screening Filter | РМ | 0.2 | 0.4 |
| SN-32/ SN-33 | Plant #2 Finished Product Loadout Tanks Filter | РМ | 0.4 | 0.6 |
| SN-34 | Plant #2 Shipping Area Vent (Truck Loadout)/Deduster Filter | РМ | 0.2 | 0.2 |
| SN-35 | Diesel Fuel Storage Tank | Insigni | ficant Act | ivity |
| SN-36 | 6 Diesel Fuel Storage Tank Insignificant Activity | | ivity | |
| SN-37 | Source removed from pe | Source removed from permit - 1998 | | |
| SN-38 & SN-49 | Plant to Plant Finished Product Conveyor Filter & Cleaning Booth/SN-04 Backup Filter | PM | 0.2 | 0.3 |
| SN-39 | 350 Baghouse | PM | 0.8 | 3.2 |
| SN-40 | Plant #1 Side #1 R/W Blower | PM | 0.2 | 0.5 |
| SN-41 | Plant #1 Side #2 R/W Blower | PM | 0.2 | 0.5 |
| SN-42 | Plant No. 1 DCF Blower | PM | 0.1 | 0.1 |
| SN-43 | Plant #2 R/W Blower | PM | 0.3 | 1.0 |
| SN-44 | Plant #2 R/W Blower | PM | 0.3 | 1.0 |
| SN-45 | 340 Baghouse | PM | 0.8 | 3.2 |
| SN-46 | 360 Baghouse | PM | 1.9 | 8.1 |
| SN-47 | 370 Baghouse | PM | 0.8 | 3.2 |
| SN-48 | This equipment was no | t installed. | • | L |
| SN-50 | Plant #2 Mill Conveyer Filter | PM | 0.3 | 1.0 |
| SN-51 | Non-point Source Emissions | PM | 3.5 | 20.0 |
| SN-52 | This equipment was no | t installed. | | L |
| SN-53 | Plant #2 Ball Mill Area – DC 221 Filter | PM | 1.9 | 8.1 |
| SN-54 | Plant #2 400 Area – DC 440 Filter | PM | 1.9 | 8.1 |
| SN-55 | Plant #1 Bin Vent Mixer 6 – Baghouse | PM | 0.1 | 0.5 |

| SN | Description | Pollutant | lb/hr | tpy |
|-------|---|------------------------|------------|-------|
| SN-56 | Line #3 Mixing Area Baghouse | PM | 1.8 | 6.2 |
| SN-57 | Line #3 Dryer Area Baghouse (process) | PM | 3.3 | 11.9 |
| SN-58 | Line #3 Screen Area Baghouse | PM | 2.6 | 9.2 |
| SN-59 | Line #3 Milled Feed Vessel Filter | Insigni | ficant Act | ivity |
| SN-60 | Line #3 Binder Feed Vessel Filter | Insignificant Activity | | ivity |
| SN-61 | Line #3 Rework Feed Vessel Filter | PM | 1.2 | 1.9 |
| SN-62 | Line #3 Pneumatic Conveyance | | | |
| SN-63 | Line #3 Pneumatic Conveyance | | | |
| SN-64 | Binder Storage Vessel Vent Filter | PM | 0.6 | 2.7 |
| SN-65 | Iron Ore Storage Vessel Vent Filter | PM | 0.1 | 0.1 |
| SN-66 | Plant-to-Plant Pneumatic Finished Product Conveyance | PM | 0.3 | 0.3 |

- 9. Visible emissions from the Particulate Sources shall not exceed 5% as measured by EPA Method 9. [§18.501 of Regulation #18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 10. If visible emissions are detected at the Particulate Sources, then the permittee shall immediately conduct a 6 minute opacity reading in accordance with EPA Reference Method #9. The results of these observations or readings shall be recorded in a log which shall be maintained on site and made available to Department personnel upon request. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 11. The permittee shall not exceed a throughput of 31,200 tons at SN-38 per consecutive twelve month period. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 12. The permittee shall not produce more than 256,000 tons of ceramic beads (standard proppant product) at the facility per consecutive 12 month period. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6]
- 13. The permittee shall maintain monthly records which demonstrate compliance with Specific Conditions 11 and 12. Records shall be updated by the fifteenth day of the month following the month for which the records pertain. These records shall be kept on site, and shall be made available to Department personnel upon request. A copy of the results of these records shall be submitted with the semi-annual report required in General Provision No. 7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

Sulfur Dioxide PAL Requirements:

14. To demonstrate compliance with the Plantwide Sulfur Dioxide Limit in Specific Condition #1, the permittee shall complete the following material balance for sulfur dioxide emissions for each month the facility operates [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]:

TPY SO₂ = (0.157)(A)(B)(ton/2000 lbs) + (C)(0.6)(ton/2000 lbs)

Where:

A = Weigh percent sulfur in the diesel fuel consumed.

(i.e.: if fuel is 0.05% sulfur, then A = 0.05)

B = Gallons of diesel fuel burned.

C = million standard cubic feet of natural gas used per year.

The facility shall keep satisfactory usage and content records to complete the above equation on site. The facility shall also complete a summation of the resultant of the above equation for the previous 12 months operation each month. A rolling 12 month total in excess of 59.4 tons shall be a violation of this permit. The records of sulfur dioxide emissions from the above material balance shall be kept on site and made available to Department personnel upon request. A copy of the results of this calculation shall be submitted with the semi-annual report required in General Provision No. 7.

15. SN-18, SN-19, SN-20, SN-21, SN-22, SN-23, SN-25, SN-28, SN-31, SN-34, SN-38*, SN-39, SN-45, SN-46, SN-47, SN-48, SN-49, SN-50, SN-52, SN-53, SN-54, SN-55, SN-56, SN-57(process), SN-58, SN-59, SN-60 and SN-61 are subject to NSPS 40 CFR 60, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants. No additional limits are necessary at this time to assure compliance other than those previously listed. The sources have been tested to meet the following standards [§19.304 of Regulation 19 and 40 CFR 60, Subpart OOO]:

| Test Method | Standard |
|--------------------|---|
| EPA Method 5 or 17 | Not in excess of 0.05 g/dscm particulate matter |
| EPA Method 9 | Not in excess of 15% opacity |

SN-18, SN-19, and SN-20 are non-stack emissions; therefore, testing for particulate was not required.

* A special request for alternate testing for SN-38 was sent to EPA Region VI, April 3, 2000. Letter dated May 11, 2000 from John R. Hepola waived requirement for particulate matter testing for the source. Source No. 66 is an identical process to SN-38 and is therefore subject to the alternate testing approved May 11, 2000.

16. SN-29B and SN-66* are subject to NSPS 40 CFR 60, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants. Within 60 days of the facility achieving the maximum production rate when the proposed changes in this permit are activated but no later than 180 days after their initial start up, these sources shall be tested to meet the following standards [§19.304 of Regulation 19 and 40 CFR 60, Subpart OOO]:

| Test Method | Standard |
|--------------------|---|
| EPA Method 5 or 17 | Not in excess of 0.05 g/dscm particulate matter |
| EPA Method 9 | Not in excess of 15% opacity |

* - see Specific Condition No. 13

COMPLIANCE ASSURANCE MONITORING PLAN CONDITIONS:

- 17. Daily visible emissions observations will be taken by trained plant operators at the exhaust of SN-56, SN-57, SN-58, and SN-61. If visible emissions are detected at these sources, then the permittee shall immediately conduct a 6 minute opacity reading in accordance with EPA Reference Method #9. The results of these observations and readings shall be recorded in a log which shall be maintained on site and made available to Department personnel upon request. [§19.304 of Regulation 19 and 40 CFR 64.3]
- 18. A weekly inspection will be completed on the baghouses listed as SN-56, SN-57, SN-58, and SN-61. A checklist will be maintained for each inspection. The results of these observations and readings shall be recorded in a log which shall be maintained on site and made available to Department personnel upon request. [§19.304 of Regulation 19 and 40 CFR 64.3]

SECTION V: COMPLIANCE PLAN AND SCHEDULE

Saint-Gobain Proppants will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

SECTION VI: PLANTWIDE CONDITIONS

- The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Regulation 19, §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Regulation 19, §19.410(B) and 40 CFR Part 52, Subpart E]
- 3. The permittee must 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) new equipment or newly 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) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. 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 shall submit the compliance test results to the Department within thirty (30) days after completing the 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]
- 4. The permittee must 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.
- 5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Regulation 19, §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §26.304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated November 22, 2006.

| Description | Category |
|--|-----------|
| Gas Fired Pilot Plant Kiln | Group A1 |
| Gas Fired Pilot Plant Test Dryer | Group A1 |
| Two Laboratory Vent Hoods | Group A5 |
| Three portable emergency use electrical generators | Group B16 |
| One Diesel Fuel Storage Tank | Group A3 |
| Two 15,000 gallon Diesel Storage Tanks | Group A13 |
| Two Line #3 Milled Feed Vessel Filters | Group A13 |

SECTION VIII: GENERAL PROVISIONS

- 1. Any terms or conditions included in this permit which 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 which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air 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. [40 CFR 70.6(b)(2)]
- 2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 CFR 70.6(a)(2) and §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26)]
- 3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [Regulation 26, §26.406]
- 4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and Regulation 26, §26.701(A)(2)]
- 5. The permittee must maintain the following records of monitoring information as required by this permit.
 - a. The date, place as defined in this permit, and time of sampling or measurements;
 - b. The date(s) analyses performed;
 - c. The company or entity performing the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

[40 CFR 70.6(a)(3)(ii)(A) and Regulation 26, §26.701(C)(2)]

- 6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 CFR 70.6(a)(3)(ii)(B) and Regulation 26, §26.701(C)(2)(b)]
- 7. The permittee must submit reports of all required monitoring every six (6) months. If permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due within thirty (30) days of the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation No. 26, §26.2 must certify all required reports. The permittee will send the reports to the address below:

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

[40 C.F.R. 70.6(a)(3)(iii)(A) and Regulation 26, §26.701(C)(3)(a)]

- 8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.
 - a. For all upset conditions (as defined in Regulation19, § 19.601), the permittee will make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:
 - i. The facility name and location;
 - ii. The process unit or emission source deviating from the permit limit;
 - iii. The permit limit, including the identification of pollutants, from which deviation occurs;
 - iv. The date and time the deviation started;
 - v. The duration of the deviation;
 - vi. The average emissions during the deviation;
 - vii. The probable cause of such deviations;
 - viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future; and
 - ix. The name of the person submitting the report.

The permittee shall make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

[Regulation 19, §19.601 and §19.602, Regulation 26, §26.701(C)(3)(b), and 40 CFR 70.6(a)(3)(iii)(B)]

- 9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 CFR 70.6(a)(5), Regulation 26, §26.701(E), and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation 26, §26.701(F)(1)]
- 11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and Regulation 26, §26.701(F)(2)]
- 12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation 26, §26.701(F)(3)]
- 13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation 26, §26.701(F)(4)]

- 14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation 26, §26.701(F)(5)]
- 15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and Regulation 26, §26.701(G)]
- 16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation 26, §26.701(H)]
- 17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation 26, §26.701(I)(1)]
- 18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation 26, §26.702(A) and (B)]
- Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 26, §26.703(A)]
- 20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation 26, §26.703(B)]
 - a. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and

- d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.
- 21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually within 30 days following the last day of the anniversary month of the initial Title V permit. The permittee must also submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and Regulation 26, §26.703(E)(3)]
 - a. The identification of each term or condition of the permit that is the basis of the certification;
 - b. The compliance status;
 - c. Whether compliance was continuous or intermittent;
 - d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
 - e. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.
- 22. Nothing in this permit will alter or affect the following: [Regulation 26, §26.704(C)]
 - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
 - b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program, consistent with §408(a) of the Act; or
 - d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.
- 23. This permit authorizes only those pollutant emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 24. 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, §18.102(C-D), Regulation 19, §19.103(D), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and CFR Part 52, Subpart E]

- 25. 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 facility's 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, §18.102(C-D), Regulation 19, §19.103(D), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and CFR Part 52, Subpart E]

- 26. 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, §18.102(C-D), Regulation19, §19.103(D), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and CFR Part 52, Subpart E]
APPENDIX A

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40 CFR 60, Subpart 000

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e-CFR Data is current as of September 5, 2008

Title 40: Protection of Environment

PART 60-STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

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Subpart OOO—Standards of Performance for Nonmetallic Mineral Processing Plants

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

§ 60.670 Applicability and designation of affected facility.

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

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

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

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

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

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

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

(d)(1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in $\S60.671$, having the same function as the existing facility, the new facility is exempt from the provisions of $\S\S60.672$, 60.674, and 60.675 except as provided for in paragraph (d)(3) of this section.

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

(3) An owner or operator replacing all existing facilities in a production line with new facilities does not

qualify for the exemption described in paragraph (d)(1) of this section and must comply with the provisions of §§60.672, 60.674 and 60.675.

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

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

| Subpart A reference | Applies to Subpart 000 | Comment |
|--|------------------------------|--|
| 60.1, Applicability | Yes | |
| 60.2, Definitions | Yes | |
| 60.3, Units and abbreviations | Yes | |
| 60.4, Address: | | |
| (a) | Yes | |
| (b) | Yes | |
| 60.5, Determination of construction or modification | Yes | |
| 60.6, Review of plans | Yes | |
| 60.7, Notification and recordkeeping | Yes | Except in (a)(2) report of anticipated date of initial startup is not required (§60.676 (h)). |
| 60.8, Performance tests | Yes | Except in (d), after 30 days notice for an initially scheduled performance test, any rescheduled performance test requires 7 days notice, not 30 days (§60.675(g)). |
| 60.9, Availability of information | Yes | |
| 60.10, State authority | Yes | |
| 60.11, Compliance with standards and maintenance requirements | Yes | Except in (b) under certain conditions (§§60.675 (c)(3) and (c)(4)), Method 9 observation may be reduced from 3 hours to 1 hour. Some affected facilities exempted from Method 9 tests (§60.675 (h)). |
| 60.12, Circumvention | Yes | |
| 60.13, Monitoring requirements | Yes | |
| 60.14, Modification | Yes | |
| 60.15, Reconstruction | Yes | |
| | | |

Table 1—Applicability of Subpart A to Subpart OOO

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

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

§ 60.671 Definitions.

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

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

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

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

Building means any frame structure with a roof.

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

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

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

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

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

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

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

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

Electronic Code of Federal Regulations:

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

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

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

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

(b) Sand and Gravel.

- (c) Clay including Kaolin, Fireclay, Bentonite, Fuller's Earth, Ball Clay, and Common Clay.
- (d) Rock Salt.
- (e) Gypsum.
- (f) Sodium Compounds, including Sodium Carbonate, Sodium Chloride, and Sodium Sulfate.
- (g) Pumice.
- (h) Gilsonite.
- (i) Talc and Pyrophyllite.
- (j) Boron, including Borax, Kernite, and Colemanite.
- (k) Barite.
- (I) Fluorospar.
- (m) Feldspar.
- (n) Diatomite.
- (o) Perlite.
- (p) Vermiculite.
- (q) Mica.

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

Nonmetallic mineral processing plant means any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located, including lime plants, power plants, steel mills, asphalt concrete plants, portland cement plants, or any other facility processing nonmetallic minerals except as provided in §60.670 (b) and (c).

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

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

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

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

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

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

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

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

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

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

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

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

§ 60.672 Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

§ 60.673 Reconstruction.

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

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

§ 60.674 Monitoring of operations.

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

devices:

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

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

§ 60.675 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (e) of this section.

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

(1) Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.

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

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

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

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

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

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

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

(i) There are no individual readings greater than 10 percent opacity; and

(ii) There are no more than 3 readings of 10 percent for the 1-hour period.

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

(i) There are no individual readings greater than 15 percent opacity; and

(ii) There are no more than 3 readings of 15 percent for the 1-hour period.

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

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

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

(i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.

(ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.

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

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

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

(1) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to, but not including the next crusher, grinding mill or storage bin.

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

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

§ 60.676 Reporting and recordkeeping.

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

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

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

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

(2) For a screening operation:

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

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

(3) For a conveyor belt:

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

(ii) The width of the replacement conveyor belt.

(4) For a storage bin:

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

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

(b) [Reserved]

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

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

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

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

(g) The owner or operator of any screening operation, bucket elevator, or belt conveyor that processes saturated material and is subject to §60.672(h) and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the 10 percent opacity limit in §60.672(b) and the emission test requirements of §60.11 and this subpart. Likewise a screening operation, bucket elevator, or belt conveyor that processes unsaturated material but subsequently processes saturated material shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the no visible emission limit in §60.672(h).

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

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

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

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

(j) The requirements of this section remain in force until and unless the Agency, in delegating

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

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

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I, Cynthia Hook, hereby certify that a copy of this permit has been mailed by first class mail to

Saint Gobain Proppants, 5300 Gerber Road, Fort Smith, AR, 72904-1699, on this

day of September, 2008.

Cynthia Hook, AAII, Air Division