ADEQ
OPERATING
AIR PERMIT

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

Permit #: 0039-AOP-R1

IS ISSUED TO:

3M Industrial Mineral Products Division
Highway 365 and Walters Drive
Little Rock, AR 72216
Pulaski County
AFIN: 60-00003

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:

February 26, 2002 and February 25, 2007

AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

_____

Keith A. Michaels Date Modified

SECTION I: FACILITY INFORMATION

PERMITTEE:	3M Industrial Mineral Products Division
AFIN:	60-00003
PERMIT NUMBER:	0039-AOP-R1
FACILITY ADDRESS:	Highway 365 and Walters Drive Little Rock, AR 72216
COUNTY:	Pulaski
CONTACT POSITION:	Environmental Supervisor
TELEPHONE NUMBER:	(501) 490-1509
REVIEWING ENGINEER:	Bryan Leamons
UTM North-South (X):	3840.8, 3839.0
UTM East-West (Y):	569.7, 564.8
Zone:	15

SECTION II: INTRODUCTION

For informational purposes only, this section does not contain enforceable conditions.

Minnesota Mining and Manufacturing, Inc., Industrial Mineral Products Division, (3M) operates a rock quarry and a roofing granule facility, both located in the Little Rock area. The quarry is located at 65th and Arch Street and the roofing granule plant is located approximately three miles east, off of Highway 365, College Station. Both are connected by privately owned railway. The railway is used to transport most of the mineral quarried at Arch Street to the College Station granule plant. It is the consensus of the ADEQ and the EPA that both units are considered one contiguous property and are subject to one Title V permitting action.

This permitting action incorporates changes resulting from a minor modification application which was approved on November 27, 2002. The approved minor-mod allowed the permittee the use of alternate pigmenting materials at the College Station Plant which contain compounds of cobalt. Cobalt compounds are emitted from various emission sources located at and downstream from the coloring operations. Total cobalt compound emissions resulting from this change total 0.26 tons per year.

Arch Street

3M mines, crushes, screens, transfers, and loads nepheline syenite mineral at the Arch Street Quarry for further processing into granules by the roofing industry. The mineral is quarried, loaded into trucks, and delivered to primary crushers on-site. After screening and further crushing, the material is loaded to railcars and shipped to the 3M roofing granule facility located at College Station. Particulate emission sources are located throughout the Arch Street Quarry. The primary method of controlling emissions, if necessary, is by water spray with or without surfactant additives at various points throughout the process. Baghouse control may also be used to control particulate emissions from the tertiary crushing and screening circuit (SN-01) when the wet suppression system is not being used, if necessary.

College Station

At the College Station facility, 3M receives, crushes, screens, and transfers nepheline syenite in the production of roofing granules. Raw nepheline syenite is brought into the plant by train car, unloaded, and placed into a raw material stockpile. The nepheline syenite is then screened, crushed, and dried. The dried material is transferred to the crushing and screening plant, where the desired size is achieved by further crushing and screening operations. The material leaving the crushing and screening lines is considered to be in "raw granule form." The raw granules are either sent to the coloring plant or stored for future use.

The first stage in the coloring process is mixing, where the raw granules are mixed with pigments. The pigment-coated granules are fired in kilns and then cooled in coolers. In the coolers, water, neutralizers, and oil are added to cool the granules and prevent dusting. These finished granules undergo a final product screening prior to the finished granule storage/loadout processes. Finished granules are fed to product bins and silos prior to shipping in tank car or truck. Waste mineral and granules are sold as aggregate, shipped away in truck or tank cars, or are stockpiled on site for future use.

Particulate emissions are generated throughout the process and are controlled by baghouses, scrubbers, water spray suppression, and other wet suppression methods including oil coating and foam dust suppression.

Emissions

Emissions from the facility result primarily from the quarrying then processing of stone. These activities along with other sources of particulates result in a total emission rate of particulate matter (PM) of 992.86 tons per year (tpy). The particulate matter under 10 microns (PM_{10}) emission rate is 719.89 tpy facility-wide. Other emissions from this facility are primarily the results of fuel combustion at the dryers, kilns, and sodium silicate plant boiler. These sources emit particulates, carbon monoxide (CO), nitrogen oxides (NO_x), sulfur dioxide (SO_2), and volatile organic compounds (VOC).

Test data obtained by 3M shows that the rock crushed and used in granule production contains small quantities of naturally occurring elemental compounds regulated by the Department as air emissions of hazardous air pollutants or HAPs pursuant to state regulation, and lead, pursuant to federal regulation. The naturally occurring compounds, regulated by the Department as HAPs, are combinations of naturally occurring elements, which include the elements arsenic, beryllium, cadmium, and manganese.

Other HAPs emitted are a result of the use of coloring pigments at various sources throughout the facility. These HAPs are lead, chromium, manganese, and cobalt compounds.

See Appendix A for a summary of emissions from the facility.

Operating Scenarios

Operational flexibility is maintained at the Arch Street quarry by overestimating some emissions from the stone processing operations. Emission rates from all equipment are calculated at maximum equipment capacities assuming that they are only controlled with wet suppression. Emissions for the baghouse control device, which may be used, were also estimated. This allows for numerous possibilities of equipment configuration that may or may not include the Tertiary Crusher Baghouse (SN-01). Emissions at Arch Street are dependent on a limited annual throughput.

College Station emissions are based on continuous annual operation at equipment rated maximum capacity except emissions that result from fuel oil combustion at the dryers and kilns. These sources may use natural gas year-round but only a limited annual amount of fuel oil is permitted. The tons per year values listed for these sources in this permit are the sum of the potential natural gas emissions and the limited fuel oil emissions. The lb/hr emissions listed are the worst case of either oil or gas.

Another variable operating scenario at the College Station plant involves the transport of material from the pugmills in the crushing and screening area to various stockpiles. The two alternatives are truck transport and a conveyerized transport system. Emissions have been estimated both ways and are double counted in this permit to provide maximum flexibility.

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Regulations

This facility is subject to regulation under the *Arkansas Air Pollution Control Code* (Regulation 18), *Regulations of the Arkansas Plan of Implementation for Air Pollution Control* (Regulation 19), and *Regulations of the Arkansas Operating Permit Program* (Regulation 26).

This facility is not subject to requirements of the *New Source Performance Standards* (NSPS), 40 CFR Part 60, Subpart OOO, because the mineral processed at the facility has been determined to be not a listed non-metallic mineral in Subpart OOO. The material contains less than 50% of any of the listed components that constitute a non-metallic mineral. See Appendix B.

The facility is not currently subject to *New Source Performance Standards* (NSPS), 40 CFR Part 60, Subpart UUU, because affected equipment was installed before the effective date of April 23, 1986.

The facility is considered a "major source" for Title V and PSD purposes. This facility is subject to applicable portions of the Prevention of Significant Deterioration (PSD) portion of the federal New Source Review (NSR) program. Currently, the facility is not subject to PSD review because no related modifications have increased PM rates by greater than 25 tpy or PM_{10} rates by greater than 15 tpy. If the permittee makes related modifications that exceed significant levels of regulated pollutants, the facility will be required to undergo PSD review for the new equipment. The new equipment source numbers added with this permit action are SN-59, 60, 61, 62, 211, 212, 213, 302, 303, 310, and 106A.

The facility does not have the potential to be a major source for HAPs at this time.

See Appendix A for a detailed list of emission rates. The following table summarizes facility-wide annual emission rates:

Pollutant	Plantwide tpy
PM	992.86
PM_{10}	719.89
NO_x	171.61
SO_2	56.15
VOC	3.91

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Pollutant	Plantwide tpy
CO	88.50
lead	0.0108
chromium	1.5009
arsenic	0.2840
beryllium	0.0018
cadmium	0.0947
manganese	2.5584
cobalt	0.2612

SECTION III: PERMIT HISTORY

Arch Street

On March 23, 1979, 3M was issued Air Permit #0542-A allowing operation of a quarry at 65th and Arch Street.

On August 31, 1993, Permit #0542-AR-1 was issued which served to include emissions sources not previously addressed, and to quantify all emission sources to be consistent with the current operations at that time.

College Station

Air Permit #0039-A was assigned to the 3M, College Station Plant, on November 20, 1970, as the initial permit for the roofing granule production facility.

Air Permit#0175-A was assigned to 3M, College Station, on December 1, 1973, for the operation of an Aerodyne Model 18000 SY cyclone to control emissions from a mixer and rotary kiln operation.

Permit #0039-AR-1 was issued on May 23, 1980, to install additional baghouse control devices.

Air Permit #0613-A was assigned to 3M on May 23, 1980, allowing instillation of a portable rotary dryer associated with a Cedarapids 15000 CFM baghouse. This equipment is no longer on-site.

Permit #0039-AR-2 was issued October 20, 1981, in order to evaluate particulate emissions and perform dispersion modeling of reported emissions to ensure that the *National Ambient Air Quality Standards* (NAAQS) were not threatened.

Permit #0039-AR-3 was issued on August 3, 1983, allowing operation of a portable crusher, associated equipment, and two baghouses. The equipment is no longer on-site.

Permit #0039-AR-4 was issued on November 18, 1987, allowing four new baghouses to control emissions from existing colorizing mixers and kilns at the granule plant.

Permit #0039-AR-5 was issued on August 23, 1991, to allow replacement of an existing cyclone and an ESP with baghouses at the #1 kiln area.

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0039-AOP-R0, issued February 26, 2002, was the initial Title V Operating Air Permit for both the College Station and Arch Street facilities. The permit combined both Minor Source Air Permits No. 0542-AR-1 (Arch Street) and No. 0039-AR-5 (College Station). Several modification requests were submitted prior to the issuance of the initial operating permit. The notable changes that occurred during this permitting action were the inclusion of HAP emission estimates and various new sources associated with new material handling systems (SN-59, 60, 61, 62, 211, 212, 213, 302, 303, 310, and 106A). It is also allowed by this permit the use of foam type dust suppressant in place of water suppression in some areas of either the Arch Street or College Station units. Source numbers (SN) in the Title V permit do not necessarily coincide with the source numbers of previous permits.

SECTION IV: EMISSION UNIT INFORMATION

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Source: Crushers - Arch St.

Table 1	
SN	**Description**
03	Traylor Crusher
07	Norberg Crusher
09* 60*	Cone Crusher Parallel Crusher
31	Tertiary Crusher
33	Tertiary Crusher

* These two crushers operate in parallel with each other and keep one emission limit

The five crushers listed in Table 1 are each operated at the Arch Street Quarry for the purpose of size reduction of material. The crusher emissions are controlled, if necessary, by either wet suppression (with or without additives), foam dust suppressant, or a combination of each at various points in the process or alternatively, with respect to the tertiary crushers, a baghouse, if necessary, to control emissions.

Specific Conditions

1. Pursuant to §19.501 et seq. of the *Regulations of the Arkansas Plan of Implementation for Air Pollution Control* (Regulation 19) effective February 15, 1999 and 40 CFR Part 52, Subpart E, from the sources listed in Table 1, the permittee shall not exceed the emission rates set forth in Appendix A of this permit for PM_{10} and lead. Compliance shall be demonstrated by compliance with Specific Conditions 4 and 5.

2. Pursuant to §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, from the sources listed in Table 1, the permittee shall not exceed the emission rates set forth in Appendix A for PM, arsenic compounds, beryllium compounds, cadmium compounds, and manganese compounds. Compliance shall be demonstrated by compliance with Specific Conditions 4 and 5.

3. Pursuant to §19.503 and 40 CFR Part 52, Subpart E, permittee shall not exceed the opacity limits in the following table. Compliance shall be demonstrated by compliance with Specific Condition 4.

Source	Opacity Limit
07, 09, 60	20%
03, 31, 33	40%

4. Pursuant to §19.303 and A.C.A., throughout the Arch Street quarry, the permittee shall utilize, as necessary, wet suppression, with or without additives, foam or water on equipment and wet suppression with or without additives on haul roads, as necessary, to prevent excess emissions. This requirement does not apply to equipment SN-30 through SN-33 (Tertiary Crushers and Screens) during operation of SN-01 (Tertiary Crushing and Screening Circuit Baghouse).

5. Pursuant to §19.705, §18.1004, A.C.A., and 40 CFR Part §70.6, the permittee shall not process more than 3,000,000 tons of material at the Arch Street unit per twelve consecutive months.

6. Pursuant to §19.705 and 40 CFR Part 52, the permittee shall maintain monthly records demonstrating compliance with Specific Condition 5. Records shall be updated by the 15th day following the previous month and a twelve month rolling total shall be kept. Records shall be made available to Department personnel upon request. The records shall be submitted to the Department in accordance with General Provision 7.

SN-01 - Tertiary Crushing and Screening Circuit Baghouse - Arch St.

3M operates a tertiary crushing and screening unit at the Arch Street Quarry. All emissions from the circuit may be captured and filtered by a 15,000 SCFM nameplate maximum capacity baghouse. For operational flexibility, emissions at Arch Street are not necessarily dependent on operation of this baghouse. Emissions from the crushers and screens that this baghouse controls have also been estimated as separate sources that are controlled by wet suppression methods.

Specific Conditions

7. Pursuant to §19.501 and 40 CFR Part 52, from SN-01, the permittee shall not exceed the emission rates set forth in Appendix A of this permit for PM_{10} and lead. Compliance shall be demonstrated by compliance with Specific Conditions 5 and 9.

8. Pursuant to §18.801 and A.C.A., from SN-01, the permittee shall not exceed the emission rates set forth in Appendix A for PM, arsenic compounds, beryllium compounds, cadmium compounds, and manganese compounds. Compliance shall be demonstrated by compliance with Specific Conditions 5.

9. Pursuant to §18.501 and 40 CFR Part 52, from SN-01, during periods when SN-01 is operating, the permittee shall not exceed 5% opacity as measured by EPA Reference Method 9.

10. Pursuant to §18.501 and A.C.A., the permittee shall conduct weekly observations of opacity at SN-01:

    The visible emission observations shall be used as a method of compliance verification for the 5% opacity limit at each baghouse. The observations shall be conducted by personnel familiar with the facility's visible emissions. If during the weekly observations, visible emissions are detected which appear to be in excess of the permitted opacity limit, the permittee shall:

    a) take immediate action to identify the cause of the visible emissions.
    b) implement all necessary corrective action.
    c) reassess the visible emissions after corrective action is taken.
        i. If excessive visible emissions are still detected, an opacity reading shall be conducted in accordance with EPA Reference Method 9. This reading shall be conducted by personnel trained and certified in the reference method. If the opacity reading exceeds the permitted limit, further corrective measures shall be taken.

ii. If no excessive visible emissions are detected, the incident shall be noted in the records as described below.

The permittee shall maintain weekly records related to all visible emission observations and Method 9 Readings. The records shall be kept on site and made available to Department personnel upon request. The records shall contain the following items:

a) the date and time of each observation/reading.
b) any observance of visible emissions appearing to be above permitted limits, or any Method 9 reading which indicates exceedence.
c) the cause of any observed exceedence of opacity limits, corrective action taken, and results of the reassessment.
d) The name of the person conducting the observation/reading.

11. Pursuant to §18.1002 and A.C.A., from SN-01, within 60 days after the equipment is put back into service, the permittee shall perform an initial performance test of SN-01 to demonstrate compliance with the 4.24 pound per hour (0.02 grain/dscf) total particulate matter limit. The source must be operating at or above 90% capacity. The permittee shall use EPA Reference Method 5 or 17 or other Department approved method. Testing shall be performed in accordance with Plantwide Condition 3.

Source: Conveyer Transfer Points - Arch St.

Table 2	
SN	**Description**
02	Transfer Tower
04	Traylor Crusher Surge Bin
05	No. 20 Conveyer
10	No. 1 Conveyer
11	Transfer Station
12	Load Out Bin
13	Load Out Bin
14	No. 3 Conveyer
15	No. 3A Conveyer
16	A.C. Crusher Surge Bin
19	Feeders
20	No. 4 Conveyer
28	No. 5 Conveyer
29	No. 6 Conveyer
59	Conveyer from AC Crusher
61	Conveyer No. 45
62	Conveyer No. 46

Each of the seventeen sources listed in Table 2 is a point of transfer from one conveyer to another, to a bin, or to a storage pile at the Arch Street Plant. Emissions from conveyers are controlled as necessary by either wet suppression, foam dust suppressant, or a combination of each at various points in the process.

Specific Conditions

12. Pursuant to §19.501 and 40 CFR Part 52, from the sources listed in Table 2, the permittee shall not exceed the emission rates set forth in Appendix A of this permit for PM_{10} and

lead. Compliance with this condition shall be demonstrated by compliance with Specific Conditions 4 and 5.

13. Pursuant to §18.801 and A.C.A., from the sources listed in Table 2, the permittee shall not exceed the emission rates set forth in Appendix A for PM, arsenic compounds, beryllium compounds, cadmium compounds, and manganese compounds. Compliance with this condition shall be demonstrated by compliance with Specific Conditions 4 and 5.

14. Pursuant to §19.503 and 40 CFR Part 52, Subpart E, permittee shall not exceed the opacity limits in the following table. Compliance shall be demonstrated by compliance with Specific Condition 4.

Source	Opacity Limit
2, 12, 13, 16, 19, 20, 28, 29, 59, 61, 62	20%
4, 5, 10, 11, 14, 15	40%

Source: Screens - Arch St.

Table 3	
SN	**Description**
06	Primary Screen
08	Primary Screen
30	Secondary Screen
32	Secondary Screen

The four screens listed in Table 3 are each operated at the Arch Street Plant for the purpose of size separation of crushed material. These screen emissions are controlled by either wet suppression, foam dust suppressant, or a combination of each at various points in the process.

Specific Conditions

15. Pursuant to §19.501 and 40 CFR Part 52, from the sources listed in Table 3, the permittee shall not exceed the emission rates set forth in Appendix A of this permit for PM_{10} and lead. Compliance shall be demonstrated by compliance with Specific Conditions 4 and 5.

16. Pursuant to §18.801 and A.C.A., from the sources listed in Table 3, the permittee shall not exceed the emission rates set forth in Appendix A for PM, arsenic compounds, beryllium compounds, cadmium compounds, and manganese compounds. Compliance shall be demonstrated by compliance with Specific Conditions 4 and 5.

17. Pursuant to §19.503 and 40 CFR Part 52, permittee shall not exceed an opacity of 40% from any screen at Arch Street. Compliance shall be demonstrated by Specific Condition 4.

Source: Material Loading - Arch St.

Table 4	
SN	**Description**
18	Railroad and Truck Loadout
58	Emergency Railroad Loadout

The two sources listed in Table 4 are each located at the Arch Street Plant. Material is loaded into trucks at the Quarry, and after being resized, it is loaded to rail car or trucks and approximately 80% is shipped to College Station.

Specific Conditions

18. Pursuant to §19.501 and 40 CFR Part 52, from the sources listed in Table 4, the permittee shall not exceed the emission rates set forth in Appendix A of this permit for PM_{10} and lead. Compliance shall be demonstrated by compliance with Specific Condition 4 and 5.

19. Pursuant to §18.801and A.C.A., from the sources listed in Table 4, the permittee shall not exceed the emission rates set forth in Appendix A for PM, arsenic compounds, beryllium compounds, cadmium compounds, and manganese compounds. Compliance shall be demonstrated by compliance with Specific Condition 4 and 5.

Source: Stockpiles - Arch St.

Table 5	
SN	**Description**
17	Tertiary Crushing Stockpile
57	Emergency Stockpile

The two stockpiles listed in Table 5 are each located at the Arch Street Plant for the purpose of storage of crushed material.

Specific Conditions

20. Pursuant to §19.501 and 40 CFR Part 52, from the sources listed in Table 5, the permittee shall not exceed the emission rates set forth in Appendix A of this permit for PM_{10} and lead. Compliance shall be demonstrated by compliance with Specific Condition 4 and 5.

21. Pursuant to §18.801 and A.C.A., from the sources listed in Table 5, the permittee shall not exceed the emission rates set forth in Appendix A for PM, arsenic compounds, beryllium compounds, cadmium compounds, and manganese compounds. Compliance shall be demonstrated by compliance with Specific Conditions 4 and 5.

Source: Miscellaneous Quarrying Activities - Arch St.

Table 6	
SN	**Description**
50	Overburden Removal
51	Drilling
52	Blasting
53	Explosives Detonation
54	Quarry Truck Loading
55	Quarry Truck Traffic

At the Arch Street Quarry, 3M uses typical methods for dislodging the mineral. Drilling and blasting are used to free material, each of which results in particulate emissions. Detonation of the explosives results in the emissions of CO, SO_x, and NO_x. After blasting, the broken mineral must be removed for further processing. At times, soils and weathered stone are removed from the upper surfaces of the quarry prior to blasting for the roofing granule mineral itself. This is recognized as overburden removal.

Quarry truck traffic is another source of particulate emissions. These emissions are controlled using wet suppression on haul roads as necessary.

Specific Conditions

22. Pursuant to §19.501 and 40 CFR Part 52, from the sources listed in Table 6, the permittee shall not exceed the emission rates set forth in Appendix A of this permit for PM_{10} and lead. Compliance shall be demonstrated by compliance with Specific Condition 4 and 5.

23. Pursuant to §18.801 and A.C.A., from the sources listed in Table 6, the permittee shall not exceed the emission rates set forth in Appendix A for PM, arsenic compounds, beryllium compounds, cadmium compounds, and manganese compounds. Compliance shall be demonstrated by compliance with Specific Condition 4 and 5.

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Source: Baghouses - College Station

Table 7		
SN	**Description**	**Nameplate Maximum Capcity (SCFM)**
101	Dryer Feed End Baghouse	24,738
102	C & S Line #1 Baghouse	24,738
103	C & S Line #2 Baghouse	24,738
104	C & S Line #3 Baghouse	30,836
105	Filler Screen Baghouse	6,723
106	Product Tripper and Storage Baghouse	10,600
106A	Bin #6 Loadout Dust Sys. Baghouse	2,800
108	Dryer No. 1 Baghouse	26,897
110	No. 7 Filler Tank Baghouse	2,977
111	No. 1 Kiln Baghouse	24,805
112	No. 2 Kiln Baghouse	24,805
113	No. 3 Kiln Baghouse	24,805
114	No. 2 Mixer Baghouse	9,925
116	Dryer No. 2 Baghouse	24,844
117	No. 1 Clay Tank Baghouse	1,500
118	No. 2 Clay Tank Baghouse	1,500
119	No. 3 Clay Tank Baghouse	1,500
124	Coloring Feed End Baghouse	15,213
125	Waste Conveyer Baghouse	1,497
128	No. 3 Mixer Baghouse	9,925
129	No. 1 Mixer Baghouse	9,925
150	IC Circuit - Silo #1 Baghouse	1,445
151	IC Circuit - Silo #2 Baghouse	5,300
152	IC Circuit - Silo #3 Baghouse	3,373
153	Waste Raw Granule Baghouse	14,165
211	Covered Raw Granule Stockpile Baghouse	8,000

Table 7		
SN	**Description**	**Nameplate Maximum Capcity (SCFM)**

The sources listed in Table 7 represent baghouse control devices used throughout the College Station unit to control particulate emissions. When properly maintained and operated at the manufacturer's recommended specifications, baghouse control devices can achieve particulate removal at or above 99%.

Each of the baghouses listed in Table 7 has the potential to emit particulates resulting from the granule production. However, two dryers and three kilns also exhaust through five baghouses emitting other criteria pollutants resulting from combustion of fuels. An unlimited amount of natural gas may be used at the dryers and kilns, but diesel usage may not exceed 2.5 million gallons per twelve consecutive months to ensure compliance with annual emission rates.

Specific Conditions

24. Pursuant to §19.501 and 40 CFR Part 52, from the sources listed in Table 7, the permittee shall not exceed the emission rates set forth in Appendix A of this permit for PM_{10}, SO_2, VOC, CO, NO_x and lead. Compliance with this condition will be demonstrated by compliance with weekly opacity readings of Specific Conditions 28 and fuel requirements of Specific Condition 29.

25. Pursuant to §18.801 and A.C.A., from the sources listed in Table 7, the permittee shall not exceed the emission rates set forth in Appendix A for PM, arsenic compounds, beryllium compounds, cadmium compounds, and manganese compounds. Compliance with this condition will be demonstrated by Specific Conditions 28.

26. Pursuant to §18.501 and 40 CFR Part 52, from the sources listed in Table 7, the permittee shall not exceed an opacity of 5% as measured by EPA Reference Method 9.

27. Pursuant to §19.503 and 40 CFR Part 52, Subpart E, during periods of smoking due to re-run of oily material or diesel fuel combustion, SN-111, 112, 113, and 116 shall not exceed 20% opacity as measured by EPA Reference Method 9.

28. Pursuant to §18.501 and A.C.A., the permittee shall conduct weekly observations of opacity for each of the sources listed in Table 7:

The visible emission observations shall be used as a method of compliance verification for the 5% opacity limit at each baghouse (or 20% for SN-111, 112, 113, 116). The observations shall be conducted by personnel familiar with the facility's visible emissions. If during the weekly observations, visible emissions are detected which appear to be in excess of the permitted opacity limit, the permittee shall:

a) take immediate action to identify the cause of the visible emissions.
b) implement all necessary corrective action.
c) reassess the visible emissions after corrective action is taken.
    i. If excessive visible emissions are still detected, an opacity reading shall be conducted in accordance with EPA Reference Method 9. This reading shall be conducted by personnel trained and certified in the reference method. If the opacity reading exceeds the permitted limit, further corrective measures shall be taken.
    ii. If no excessive visible emissions are detected, the incident shall be noted in the records as described below.

The permittee shall maintain weekly records related to all visible emission observations and Method 9 Readings. The records shall be kept on site and made available to Department personnel upon request. The records shall contain the following items:

a) the date and time of each observation/reading.
b) any observance of visible emissions appearing to be above permitted limits, or any Method 9 reading which indicates exceedence.
c) the cause of any observed exceedence of opacity limits, corrective action taken, and results of the reassessment.
d) the name of the person conducting the observation/reading.

29. Pursuant to §19.705, A.C.A, and 40 CFR §70.6, the permittee shall not consume more than 2,500,000 gallons of diesel per twelve consecutive months at the dryers and kilns (SN-108, 111 through 113, and 116).

30. Pursuant to §19.705 and 40 CFR Part 52, the permittee shall maintain monthly records to demonstrate compliance with Specific Condition 29. Records shall be updated by the 15th day following the previous month. Records shall be accompanied with a twelve month rolling total. Records shall be kept on-site and made available to Department personnel upon request. Records shall be submitted in accordance with General Provision 7.

31. Pursuant to §19.705, A.C.A, and 40 CFR §70.6, the permittee shall not consume diesel with a fuel bound sulfur content greater than 0.3% by weight.

32. Pursuant to §19.705 and 40 CFR Part 52 the permittee shall maintain monthly records to demonstrate compliance with Specific Condition 31. Records shall be in the form of supplier certification. Records shall be updated with each delivery of fuel. Records shall be kept on-site for at least one year. Records shall be made available to Department personnel upon request. Records shall be submitted in accordance with General Provision 7.

Source: Cooler Scrubbers - College Station

Table 8	
SN	**Description**
115	No. 1 Cooler Scrubber
154	No. 2 Cooler Scrubber
155	No. 3 Cooler Scrubber

33. Pursuant to §19.501 and 40 CFR Part 52, from the sources listed in Table 8, the permittee shall not exceed the emission rates set forth in Appendix A of this permit for PM_{10}, SO_2, VOC, CO, NO_x, and lead. Compliance with this condition will be demonstrated by compliance with Specific Condition 36 and 38.

34. Pursuant to §18.801 and A.C.A., from the sources listed in Table 8, the permittee shall not exceed the emission rates set forth in Appendix A for PM, arsenic compounds, beryllium compounds, cadmium compounds, and manganese compounds. Compliance with this condition will be demonstrated by compliance with Specific Condition 36 and 38.

35. Pursuant to §18.501 and 40 CFR Part 52, from the sources listed in Table 8, the permittee shall not exceed an opacity of 20% measured by EPA Reference Method 9.

36. Pursuant to §19.705, §18.1004, A.C.A., and 40 CFR §70.6, the permittee shall not exceed 4.8 pounds per hour total particulate matter during operation at each of the sources listed in Table 8. Compliance shall be demonstrated by the following stack testing requirement.

37. Pursuant to §18.1002 and A.C.A, the permittee shall perform an initial performance test of the three sources listed in Table 8 to demonstrate compliance with the 4.8 pound per hour total particulate matter requirement. The sources must be operating at or above 90% capacity. The permittee shall use EPA Reference Method 5 or other Department approved method. Testing shall be performed in accordance with Plantwide Condition 3. During testing, scrubber liquid flow rate must be monitored.

38. Pursuant to §18.1004 and A.C.A, the permittee shall maintain minimum liquid flow at each scrubber listed in Table 8, as determined during successful performance testing. The permittee shall install a flow meter at each scrubber and record liquid flow once

daily. Records shall be updated daily, kept on-site, and made available to Department personnel upon request.

Source: Conveyer Transfer Points - College Station

Table 9	
SN	**Description**
107	Feeders at Raw Stockpile
109	Conveyer J.B.
156	Conveyer No. 1
157	Conveyer No. 2
158	Transfer Conveyer No. 20
159	Transfer Conveyer No. 21
160	Transfer Conveyer No. 22
161	Transfer Conveyer No. 23
162	Transfer Conveyer No. 24
163	Transfer Conveyer No. 25
164	Transfer Conveyer No. 33
165	Transfer Conveyer No. 34
166	Transfer Conveyer No. 35
167	Transfer Conveyer No. 36
168	Transfer Conveyer No. 37
169	Transfer Conveyer No. 39
170	Transfer Conveyer No. 40
171	Transfer Conveyer No. 41
172	Transfer Conveyer No. 42
173	Conveyer No. 15
174	Conveyer No. 16
175	Conveyer No. 31
176	Conveyer 31A (Sodium Silicate Plant)
183	Pugmill at Waste Silo #4

Table 9	
SN	**Description**
184	Pugmill at Waste Silo #4
185	Pugmill at Coloring Waste Bin
212	Conveyer 43
213	Conveyer 44
310	Truck /Railcar Loading Conveyer

Specific Conditions

39. Pursuant to §19.501 and 40 CFR Part 52, Subpart E, from the sources listed in Table 9, the permittee shall not exceed the emission rates set forth in Appendix A of this permit for PM_{10} and lead. Compliance with this condition will be demonstrated by Specific Condition 42.

40. Pursuant to §18.801 and A.C.A., from the sources listed in Table 9, the permittee shall not exceed the emission rates set forth in Appendix A for PM, arsenic compounds, beryllium compounds, cadmium compounds, and manganese compounds. Compliance with this condition will be demonstrated by Specific Condition 42.

41. Pursuant to §19.503 and A.C.A., permittee shall not exceed the opacity limits in the following table. Compliance with this condition will be demonstrated by Specific Condition 42.

Source	Opacity Limit
109, 164, 167, 168, 169, 170, 171, 172, 184, 185, 212, 213	20%
107, 156, 157, 158, 159, 160, 161, 162, 163, 165, 166, 173, 174, 175, 176, 183, 310	40%

42. Pursuant to §19.303 and A.C.A., the permittee shall utilize wet suppression with or without foam, water spray with or without surfactant additives, or other dust suppressant as the primary methods of controlling emissions when necessary. This shall be used for equipment and haul roads to prevent excess emissions throughout College Station Granule Plant.

Source: Screens - College Station

Table 10	
SN	**Description**
131	Screen No. 25
132	Screen No. 26
133	Screen No. 29
134	Screen No. 28
135	Screen No. 27

Each of these sources is located within a building vented uncontrolled to the atmosphere.

43. Pursuant to §19.501 and 40 CFR Part 52, from the sources listed in Table 10, the permittee shall not exceed the emission rates set forth in Appendix A of this permit for PM_{10} and lead. Compliance with this condition will be demonstrated by Specific Condition 42.

44. Pursuant to §18.801 and A.C.A., from the sources listed in Table 10, the permittee shall not exceed the emission rates set forth in Appendix A for PM, arsenic compounds, beryllium compounds, cadmium compounds, and manganese compounds. Compliance with this condition will be demonstrated by Specific Condition 42.

45. Pursuant to §19.503 and A.C.A., the permittee shall not exceed an opacity of 40% from the building vent associated with the sources listed in Table 10. Compliance with this condition will be demonstrated by Specific Condition 42.

Source: Elevators - College Station

Table 11	
SN	**Description**
121	No. 21 Elevator
122	No. 22 Elevator
123	No. 23 Elevator
186	Bucket Elevator No. 18
187	Bucket Elevator No. 19
188	Bucket Elevator No. 20
189	Bucket Elevator No. 24
190	Bucket Elevator No. 25
191	Bucket Elevator No. 27 (Sodium Silicate)

Specific Conditions

46. Pursuant to §19.501 and 40 CFR Part 52, from the sources listed in Table 11, the permittee shall not exceed the emission rates set forth in Appendix A of this permit for PM_{10} and lead. Compliance with this condition will be demonstrated by Specific Condition 42.

47. Pursuant to §18.801and A.C.A., from the sources listed in Table 11, the permittee shall not exceed the emission rates set forth in Appendix A for PM, arsenic compounds, beryllium compounds, cadmium compounds, and manganese compounds. Compliance with this condition will be demonstrated by specific condition 42.

48. Pursuant to §19.503 and A.C.A., permittee shall not exceed the opacity limits in the following table. Compliance with this condition will be demonstrated by Specific Condition 42.

Source	Opacity Limit
190	20%
121, 122, 123, 186, 187, 188, 189, 191	40%

Source: Storage Bins and Stockpiles - College Station

Table 12	
SN	**Description**
199	Product Bin P1
200	Product Bin P2
201	Product Bin P3
202	Product Bin P4
203	Product Bin P5
204	Product Bin P6
205	Product Bin P7
206	Product Bin P8
207	Waste Bin W21
208	Waste Bin W22
209	Waste Bin W23
210	Waste Bin W24
303	Pugmill Discharge Pile
307	Temporary Storage Stockpile
308	Raw Stockpile

Specific Conditions

49. Pursuant to §19.501 and 40 CFR Part 52, from the sources listed in Table 12, the permittee shall not exceed the emission rates set forth in Appendix A of this permit for PM_{10} and lead. Compliance with this condition will be demonstrated by Specific Condition 42.

50. Pursuant to §18.801 and A.C.A., from the sources listed in Table 12, the permittee shall not exceed the emission rates set forth in Appendix A for PM, arsenic compounds, beryllium compounds, cadmium compounds, and manganese compounds. Compliance with this condition will be demonstrated by Specific Condition 42.

Source: Material Loading/ Unloading and Vehicle Traffic - College Station

Table 13	
SN	**Description**
194	Finished Granule Storage and Loading
195	Waste Granule Storage and Loading
300	Train Car Unload
301	Truck Loading at C & S Pugmill
302	Mineral Unloading at Pugmill Discharge Pile
304	Train Car Unloading - Sodium Silicate
305	Truck Loading at Coloring Pugmill
306	Plant Vehicle Traffic including Baghouse Waste Haul Off

Specific Conditions

51. Pursuant to §19.501 and 40 CFR Part 52, from the sources listed in Table 13, the permittee shall not exceed the emission rates set forth in Appendix A of this permit for PM_{10} and lead. Compliance with this condition will be demonstrated by Specific Condition 42.

52. Pursuant to §18.801 and A.C.A., from the sources listed in Table 13, the permittee shall not exceed the emission rates set forth in Appendix A for PM, arsenic compounds, beryllium compounds, cadmium compounds, and manganese compounds. Compliance with this condition will be demonstrated by Specific Condition 42.

Source: Sodium Silicate Plant - College Station

Table 14	
SN	**Description**
120	Sodium Silicate Bin
130	Sodium Silicate Plant Boiler
176	Conveyer 31A
191	Bucket Elevator 27
304	Train Car Unload - Sodium Silicate

Sources 120 and 130 are decommissioned equipment. Both pieces of equipment were used in the sodium silicate section of the College Station Plant. 3M currently uses a form of sodium silicate in liquid form; therefore, this equipment is not operating. The factors used for their emissions estimates are currently zero. If the equipment is brought back into service, a permit modification will be required to correct emission rates and conditional requirements. Other equipment listed in table 14 is currently in operation.

SN-130 is a 9.9 MM Btu/hr heat input boiler. The equipment was constructed in 1964, and not modified since. SN-130 is, therefore, exempt from NSPS requirements.

53. Pursuant to §19.501 and 40 CFR Part 52, from the sources listed in Table 14, the permittee shall not exceed the emission rates set forth in Appendix A of this permit for PM_{10}, SO_2, VOC, CO, NO_x and lead. Compliance with this condition will be demonstrated by compliance with Specific Condition 42 and 55.

54. Pursuant to §18.801 and A.C.A., from the sources listed in Table 14, the permittee shall not exceed the emission rates set forth in Appendix A for PM, arsenic compounds, beryllium compounds, cadmium compounds, and manganese compounds. Compliance with this condition will be demonstrated by compliance with Specific Condition 42 and 55.

55. Pursuant to §19.705, §18.1004, A.C.A., and 40 CFR §70.6, the permittee shall not operate sources SN-120 or SN-130 at any time without a permit modification to correct the emission rates for these sources.

Source: Cyclones - College Station

Table 15				
SN	**Description**	**Pollutant**	**lb/hour**	**ton per year**
115	No. 1 Cooler Cyclone	PM PM10 arsenic beryllium cadmium manganese	8.3 8.3 0.00061 0.00085 0.00020 0.00530	36.4 36.4 0.00268 0.00371 0.00089 0.02323
154	No. 2 Cooler Cyclone	PM PM10 arsenic beryllium cadmium manganese	8.3 8.3 0.00061 0.00085 0.00020 0.00530	36.4 36.4 0.00268 0.00371 0.00089 0.02323
155	No. 3 Cooler Cyclone	PM PM10 arsenic beryllium cadmium manganese	8.3 8.3 0.00061 0.00085 0.00020 0.00530	36.4 36.4 0.00268 0.00371 0.00089 0.02323

At the College Station Granule plant, each cooler cyclone listed above will be replaced by a scrubber with the same source number. The following conditions are provided for temporary authorization to operate the existing equipment while the new equipment is being constructed. The following conditions may be removed after completion of construction by an approved administrative amendment.

56. Pursuant to §19.501 et seq. of the *Regulations of the Arkansas Plan of Implementation for Air Pollution Control* (Regulation 19) effective February 15, 1999 and 40 CFR Part 52, Subpart E, from the sources listed in Table 15, the permittee shall not exceed the emission rates set forth in Table 15 of this permit for PM_{10}. Compliance with this condition will be demonstrated by compliance with Specific Condition 58.

57. Pursuant to §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, from the sources listed in Table 15, the permittee shall not exceed the emission rates set forth in Table 15 for PM, arsenic compounds, beryllium compounds, cadmium compounds, and manganese compounds. Compliance with this condition will be demonstrated by compliance with Specific Condition 58.

58. Pursuant to §19.705, A.C.A., and 40 CFR §70.6, the permittee shall not exceed 0.02 grain/dscf of total particulate matter during operation of the sources listed in Table 8. Compliance shall be demonstrated by the following stack testing requirement.

59. Pursuant to §19.702 and 40 CFR Part 52, within 180 days of issuance of this permit, if the cyclones listed in Table 15 are still in operation, the permittee shall perform an initial performance test of the three sources listed in Table 15 to demonstrate compliance with 0.02 grains/dscf total particulate matter requirement. The sources must be operating at or above 90% capacity. The permittee shall use EPA Reference Method 5 or 17 or other Department approved method. Testing shall be performed in accordance with Plantwide Condition 3.

3M Industrial Mineral Products Division
Permit #: 0039-AOP-R1
AFIN #: 60-00003

Source: Pigment Usage at Various Sources

Table 16	
SN	**Description**
111	No. 1 Kiln Baghouse
112	No. 2 Kiln Baghouse
113	No. 3 Kiln Baghouse
114	No. 2 Mixer Baghouse
115	No. 1 Cooler Cyclone/ Scrubber
121	No. 21 Elevator
122	No. 22 Elevator
123	No. 23 Elevator
131	Screen No. 25
132	Screen No. 26
133	Screen No. 29
134	Screen No. 28
135	Screen No. 27
154	No. 2 Cooler Cyclone/ Scrubber
155	No. 3 Cooler Cyclone/ Scrubber
158	Transfer Conveyer No. 20
159	Transfer Conveyer No. 21
160	Transfer Conveyer No. 22
161	Transfer Conveyer No. 23
162	Transfer Conveyer No. 24
163	Transfer Conveyer No. 25
164	Transfer Conveyer No. 33
165	Transfer Conveyer No. 34
166	Transfer Conveyer No. 35
167	Transfer Conveyer No. 36

Table 16	
SN	**Description**
168	Transfer conveyer No. 37
169	Transfer conveyer No. 39
170	Transfer conveyer No. 40
171	Transfer conveyer No. 41
172	Transfer conveyer No. 42
176	Conveyer 31A (Sodium Silicate Plant)
186	Bucket Elevator No. 18
187	Bucket Elevator No. 19
188	Bucket Elevator No. 20
189	Bucket Elevator No. 24
190	Bucket Elevator No. 25
191	Bucket Elevator No. 27 (Sodium Silicate)
194	Finished Granule Storage/ Loading
195	Waste Granule Storage/ Loading
199	Product Bin P1
200	Product Bin P2
201	Product Bin P3
202	Product Bin P4
203	Product Bin P5
204	Product Bin P6
205	Product Bin P7
206	Product Bin P8
207	Waste Bin W21
208	Waste Bin W22
209	Waste Bin W23
210	Waste Bin W24
304	Train Car Unload (Sodium Silicate)

Table 16	
SN	**Description**
305	Truck Loading at Coloring Pugmill

Coloring pigments are added to granules at an intermediate stage during production. The pigments have a small weight fraction of HAPs and, therefore, impact air emissions at subsequent sources (Table 16). The pigment HAPs have been accounted for these sources in Appendex A.

60. Pursuant to §18.801 and A.C.A., from the sources listed in Table 16, the permittee shall not exceed the emission rates set forth in Appendix A for lead, chromium, manganese, and cobalt compounds that result directly from coloring pigment usage at these sources. Compliance shall be demonstrated by compliance with the particulate matter emission limits at these sources and by compliance with Specific Conditions 61.

61. Pursuant to §18.1004 and A.C.A., the permittee shall not exceed the HAP content limits in the following table:

Maximum Content Limits for Finished Granules	
HAP	Limit
lead compounds	0.024 lb/ton (.0012% by weight)
chromium compounds	6.5 lb/ton (0.325% by weight)
manganese compounds	0.3 lb/ton (0.015% by weight)
cobalt compounds	4 lb/ton (0.2% by weight)

The permittee shall keep records demonstrating compliance with the finished granule composition limits. Records may be in the form of MSDS sheets, product labels, lab analyses, or calculations using Department approved methodology. Records shall be kept on-site and made available to Department personnel upon request.

SECTION V: COMPLIANCE PLAN AND SCHEDULE

According to information submitted to the date of issuance of this permit, 3M is in compliance with the PM_{10} NAAQS. To ensure ongoing compliance, 3M shall continue to operate existing on-site ambient air monitors according to protocols outlined in past monitoring submissions and according to the Department's CEMs conditions found in Appendix D of this permit. The facility shall continue to submit quarterly monitoring reports, with the complete data, in a similar format as previously submitted reports. Any excess in the PM_{10} 24-hour or annual average PM_{10} concentrations shall be summarized, along with an explanation for each exceedance. Concentrations exceeding NAAQS may be cause for reopening of this permit. This schedule for submission shall be followed until the permittee has submitted five years of continuous data. At that point, the permittee may apply for removal of this requirement.

3M is in compliance with the applicable regulations cited in the permit application. 3M 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

1. Pursuant to §19.704 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the Director shall be notified in writing within thirty (30) days after construction has commenced, construction is complete, the equipment and/or facility is first placed in operation, and the equipment and/or facility first reaches the target production rate.

2. Pursuant to §19.410(B) of Regulation 19, 40 CFR Part 52, Subpart E, the Director may cancel all or part of this permit if the construction or modification authorized herein is not begun within 18 months from the date of the permit issuance or if the work involved in the construction or modification is suspended for a total of 18 months or more.

3. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any equipment that is to be tested, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, shall be tested with the following time frames: (1) Equipment to be constructed or modified shall be tested within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source or (2) equipment already operating shall be tested according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee shall notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. Compliance test results shall be submitted to the Department within thirty (30) days after the completed testing.

4. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall provide:

    a. Sampling ports adequate for applicable test methods
    b. Safe sampling platforms
    c. Safe access to sampling platforms
    d. Utilities for sampling and testing equipment

5. Pursuant to §19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C. A. §8-4-304 and §8-4-311, the equipment, control apparatus and emission monitoring equipment shall be operated within their design limitations and maintained in good condition at all times.

6. Pursuant to Regulation 26 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit subsumes and incorporates all previously issued air permits for this facility.

Acid Rain (Title IV)

7. Pursuant to §26.701 of Regulation #26 and 40 CFR 70.6(a)(4), the permittee is prohibited from causing any emissions which exceed any allowances that the source lawfully holds under Title IV of the Act or the regulations promulgated thereunder. No permit revision is required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. This permit establishes no limit on the number of allowances held by the permittee. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement of this permit or the Act. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Act.

Title VI Provisions

8. The permittee shall comply with the standards for labeling of products using ozone depleting substances pursuant to 40 CFR Part 82, Subpart E:

    a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
    b. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
    c. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
    d. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.

9. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

    a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
    b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.

c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like appliance" as defined at §82.152.)
e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

10. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

11. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

    The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant.

12. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program.

SECTION VII: INSIGNIFICANT ACTIVITIES

Pursuant to §26.304 of Regulation 26, the following sources are insignificant activities. Any activity for which a state or federal applicable requirement applies is not insignificant even if this activity meets the criteria of §304 of Regulation 26 or is listed below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated May 19, 1998.

Description	Category
550 Gallon Gasoline Tank (Arch Street)	A-13
12,000 Gallon Diesel Tank (College Station)	A-13
270 Gallon Gasoline Tank (College Station)	A-13
20,000 Gallon Oil Tank (College Station)	A-13
20,000 Gallon Oil Tank (College Station)	A-13
Emissions at crushers where small quantities of metallic materials are potentially emitted as a direct result of crusher wear	A-13

Pursuant to §26.304 of Regulation 26, the emission units, operations, or activities contained in Regulation 19, Group A, Appendix B, have been determined by the Department to be insignificant activities. Activities included in this list are allowable under this permit and need not be specifically identified.

SECTION VIII: GENERAL PROVISIONS

1. Pursuant to 40 CFR 70.6(b)(2), 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 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. Pursuant to 40 CFR 70.6(a)(2) and §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), effective August 10, 2000, 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.

3. Pursuant to §26.406 of Regulation #26, it is the duty of the permittee to submit a complete application for permit renewal at least six (6) months prior to the date of permit expiration. Permit expiration terminates the permittee's right to operate unless a complete renewal application was submitted at least six (6) months prior to permit expiration, in which case the existing permit shall 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.

4. Pursuant to 40 CFR 70.6(a)(1)(ii) and §26.701(A)(2) of Regulation #26, 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, both provisions are incorporated into the permit and shall be enforceable by the Director or Administrator.

5. Pursuant to 40 CFR 70.6(a)(3)(ii)(A) and §26.701(C)(2) of Regulation #26, records of monitoring information required by this permit shall include the following:

    a. The date, place as defined in this permit, and time of sampling or measurements;
    b. The date(s) analyses were performed;

c. The company or entity that performed 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.

6. Pursuant to 40 CFR 70.6(a)(3)(ii)(B) and §26.701(C)(2)(b) of Regulation #26, records of all required monitoring data and support information shall be retained for a period of at least 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.

7. Pursuant to 40 CFR 70.6(a)(3)(iii)(A) and §26.701(C)(3)(a) of Regulation #26, the permittee shall submit reports of all required monitoring every 6 months. If no other reporting period has been established, the reporting period shall end on the last day of the anniversary month of this permit. The report shall be due within 30 days of the end of the reporting period. Even though the reports are due every six months, each report shall contain a full year of data. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official as defined in §26.2 of Regulation #26 and must be sent to the address below.

Arkansas Department of Environmental Quality
Air Division
ATTN: Compliance Inspector Supervisor
Post Office Box 8913
Little Rock, AR 72219

8. Pursuant to 40 CFR 70.6(a)(3)(iii)(B), §26.701(C)(3)(b) of Regulation #26, and §19.601 and 19.602 of Regulation #19, all deviations from permit requirements, including those attributable to upset conditions as defined in the permit shall be reported to the Department. An initial report shall be made to the Department by the next business day after the occurrence. The initial report may be made by telephone and shall include:

a. The facility name and location,
b. The process unit or emission source which is deviating from the permit limit,
c. The permit limit, including the identification of pollutants, from which deviation occurs,
d. The date and time the deviation started,
e. The duration of the deviation,

f. The average emissions during the deviation,
g. The probable cause of such deviations,
h. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and
i. The name of the person submitting the report.

A full report shall be made in writing to the Department within five (5) business days of discovery of the occurrence and shall include, in addition to the information required by initial report, a schedule of actions to be taken to eliminate future occurrences and/or to minimize the amount by which the permits limits are exceeded and to reduce the length of time for which said limits are exceeded. If the permittee wishes, they 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 such report will serve as both the initial report and full report.

9. Pursuant to 40 CFR 70.6(a)(5) and §26.701(E) of Regulation #26, and A.C.A.§8-4-203, as referenced by §8-4-304 and §8-4-311, if any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity shall 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.

10. Pursuant to 40 CFR 70.6(a)(6)(i) and §26.701(F)(1) of Regulation #26, 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, or modification; or for denial of a permit renewal application. Any permit noncompliance with a state requirement constitutes a violation of the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq*.) and is also grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

11. Pursuant to 40 CFR 70.6(a)(6)(ii) and §26.701(F)(2) of Regulation #26, 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 in order to maintain compliance with the conditions of this permit.

12. Pursuant to 40 CFR 70.6(a)(6)(iii) and §26.701(F)(3) of Regulation #26, this permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or

termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

13. Pursuant to 40 CFR 70.6(a)(6)(iv) and §26.701(F)(4) of Regulation #26, this permit does not convey any property rights of any sort, or any exclusive privilege.

14. Pursuant to 40 CFR 70.6(a)(6)(v) and §26.701(F)(5) of Regulation #26, the permittee shall 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 shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the permittee may be required to furnish such records directly to the Administrator along with a claim of confidentiality.

15. Pursuant to 40 CFR 70.6(a)(7) and §26.701(G) of Regulation #26, the permittee shall pay all permit fees in accordance with the procedures established in Regulation #9.

16. Pursuant to 40 CFR 70.6(a)(8) and §26.701(H) of Regulation #26, no permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for elsewhere in this permit.

17. Pursuant to 40 CFR 70.6(a)(9)(i) and §26.701(I)(1) of Regulation #26, if the permittee is allowed to operate under 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 scenario under which the facility or source is operating.

18. Pursuant to 40 CFR 70.6(b) and §26.702(A) and (B) of Regulation #26, all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Act unless the Department has specifically designated as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements.

19. Pursuant to 40 CFR 70.6(c)(1) and §26.703(A) of Regulation #26, any document (including reports) required by this permit shall contain a certification by a responsible official as defined in §26.2 of Regulation #26.

20. Pursuant to 40 CFR 70.6(c)(2) and §26.703(B) of Regulation #26, the permittee shall allow an authorized representative of the Department, upon presentation of credentials, to perform the following:

    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 that must be kept 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 the purpose of assuring compliance with this permit or applicable requirements.

21. Pursuant to 40 CFR 70.6(c)(5) and §26.703(E)(3) of Regulation #26, the permittee shall submit a compliance certification with terms and conditions contained in the permit, including emission limitations, standards, or work practices. This compliance certification shall be submitted annually and shall be submitted to the Administrator as well as to the Department. All compliance certifications required by this permit shall include the following:

    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. Pursuant to §26.704(C) of Regulation #26, nothing in this permit shall alter or affect the following:

    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. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit authorizes only those pollutant emitting activities addressed herein.

APPENDIX A

Emission Rate Tables

Pounds Per Hour

3-M Industrial Minerals - Little Rock
Permit #: 39-AOP-R1
AFIN #: 60-00003

lb/hr

								HAPs from pigments only			
SN	**Source Description**	**PM**	**PM10**	**NOx**	**SO2**	**VOC**	**CO**	**lead**	**chromium**	**manganese**	**cobalt**
1	Tertiary Crushing Baghouse	2.57	2.57								
2	Transfer Tower	0.08	0.08								
3	Traylor Crusher	1.12	0.94								
4	Traylor Crusher Surge Bin	0.16	0.08								
5	No. 20 Conveyer	0.16	0.08								
6	Primary Screen	2.82	1.34								
7	A.C. Crusher	1.12	0.94								
8	Screen	2.82	1.34								
9	Cone Crusher	1.12	0.94								
10	No. 1 Crusher	0.16	0.08								
11	Transfer Station	0.16	0.08								
12	Load Out Bin	0.20	0.10								
13	Load Out Bin	0.20	0.10								
14	No. 3 Conveyer	0.16	0.08								
15	No. 3A Conveyer	0.16	0.08								
16	A.C. Crusher Surge Bin	0.16	0.08								
17	Tertiary Crushing Stock Pile	0.13	0.13								
18	Railroad Loadout	0.20	0.10								
19	Feeders	0.15	0.07								
20	No. 4 Conveyers	0.15	0.07								
28	No. 5 Conveyer	0.15	0.07								
29	No. 6 Conveyer	0.15	0.07								
30	Screen	1.32	0.63								
31	Crusher	0.93	0.44								
32	Screen	1.32	0.63								
33	Crusher	0.93	0.44								
50	Overburden Removal	13.00	6.25								
51	Drilling	0.27	0.13								
52	Blasting	9.40	4.70								
53	Blasting Explosive (ANFO)			13.60	1.60		53.60				
54	Quarry Truck Loading	0.34	0.16								
55	Quarry Truck Traffic	19.26	8.67								
57	Emergency Stockpile	0.48	0.48								

3-M Industrial Minerals - Little Rock
Permit #: 39-AOP-R1
AFIN #: 60-00003

lb/hr

								HAPs from pigments only			
SN	**Source Description**	**PM**	**PM10**	**NOx**	**SO2**	**VOC**	**CO**	**lead**	**chromium**	**manganese**	**cobalt**
58	Emergency Railroad Loadout	0.08	0.04								
59	Conveyer from AC Crusher	0.16	0.08								
60	Parallel Crusher	bubbled with SN-09									
61	No. 45 Conveyer	0.16	0.08								
62	No. 46 Conveyer	0.16	0.08								
101	Dryer Feed End Baghouse (BH)	5.00	5.00								
102	C & S Line #1 (BH)	5.00	5.00								
103	C & S Line # 2 (BH)	5.00	5.00								
104	C & S Line #3 (BH)	5.00	5.00								
105	Filler Screen Baghouse	5.00	5.00								
106	Product Tripper and Storage Baghouse	5.00	5.00								
106A	Bin #6 Loadout Dust System	0.50	0.50								
107	Feeders	0.08	0.04								
108	Dryer No. 1 (BH)	5.00	5.00	10.14	21.91	0.36	2.54				
109	Conveyer J.B.	0.08	0.04								
110	No. 7 Filler Tank (BH)	1.00	1.00								
111	No. 1 Kiln (BH)	5.60	5.60	7.14	15.43	0.25	1.79	6.59E-05	1.80E-02	8.40E-04	3.14E-03
112	No. 2 Kiln (BH)	5.60	5.60	7.14	15.43	0.25	1.79	6.59E-05	1.80E-02	8.40E-04	3.14E-03
113	No. 3 Kiln (BH)	5.60	5.60	7.14	15.43	0.25	1.79	6.59E-05	1.80E-02	8.40E-04	3.14E-03
114	No. 2 Mixer (BH)	2.40	2.40					2.82E-05	7.72E-03	3.60E-04	1.34E-03
115	No. 1 Cooler (Scrubber)	4.80	4.80					5.64E-05	1.54E-02	7.20E-04	2.69E-03
116	Dryer No. 2 (BH)	8.00	8.00	2.86	6.17	0.10	0.71				
117	No. 1 Clay Tank (BH)	3.00	3.00								
118	No. 2 Clay Tank (BH)	3.00	3.00								
119	No. 3 Clay Tank (BH)	3.00	3.00								
120	Sodium Silicate Bin	0.00	0.00					0.00E+00	0.00E+00	0.00E+00	0.00E+00
121	No. 21 Elevator	3.05	3.05					3.59E-05	9.81E-03	4.58E-04	1.71E-03
122	No. 22 Elevator	3.05	3.05					3.59E-05	9.81E-03	4.58E-04	1.71E-03
123	No. 23 Elevator	3.05	3.05					3.59E-05	9.81E-03	4.58E-04	1.71E-03
124	Coloring Feed End (BH)	5.00	5.00								
125	Waste Conveyer Baghouse	3.00	3.00					3.53E-05	9.65E-03	4.50E-04	1.68E-03
128	No. 3 Mixer (BH)	2.40	2.40					2.82E-05	7.72E-03	3.60E-04	1.34E-03

3-M Industrial Minerals - Little Rock
Permit #: 39-AOP-R1
AFIN #: 60-00003

lb/hr

								HAPs from pigments only			
SN	**Source Description**	**PM**	**PM10**	**NOx**	**SO2**	**VOC**	**CO**	**lead**	**chromium**	**manganese**	**cobalt**
129	No. 1 Mixer (BH)	2.40	2.40					2.82E-05	7.72E-03	3.60E-04	1.34E-03
130	Sodium Silicate Plant Boiler	0.00	0.00	0.00	0.00	0.00	0.00				
131	Screen No. 25	0.26	0.13					3.06E-06	8.37E-04	3.90E-05	1.46E-04
132	Screen No. 26	0.26	0.13					3.06E-06	8.37E-04	3.90E-05	1.46E-04
133	Screen No. 29	0.26	0.13					3.06E-06	8.37E-04	3.90E-05	1.46E-04
134	Screen No. 28	0.26	0.13					3.06E-06	8.37E-04	3.90E-05	1.46E-04
135	Screen No. 27	0.26	0.13					3.06E-06	8.37E-04	3.90E-05	1.46E-04
150	IC Circuit - Silo #1(BH)	0.30	0.30								
151	IC Circuit - Silo #2 (BH)	1.10	1.10								
152	IC Circuit - Silo #3 (BH)	0.80	0.80								
153	Waste Raw Granule (BH)	2.43	2.43								
154	No. 2 Cooler (Scrubber)	4.80	4.80					5.64E-05	1.54E-02	7.20E-04	2.69E-03
155	No. 3 Cooler (Scrubber)	4.80	4.80					5.64E-05	1.54E-02	7.20E-04	2.69E-03
156	Conveyer No. 1	2.23	1.06								
157	Conveyer No. 2	2.35	1.12								
158	Transfer Conveyer No. 20	0.02	0.01					2.35E-07	6.44E-05	3.00E-06	1.12E-05
159	Transfer Conveyer No. 21	0.20	0.01					2.35E-06	6.44E-04	3.00E-05	1.12E-04
160	Transfer Conveyer No. 22	0.10	0.00					1.18E-06	3.22E-04	1.50E-05	5.60E-05
161	Transfer Conveyer No. 23	0.04	0.02					4.70E-07	1.29E-04	6.00E-06	2.24E-05
162	Transfer Conveyer No. 24	0.04	0.02					4.70E-07	1.29E-04	6.00E-06	2.24E-05
163	Transfer Conveyer No. 25	0.02	0.01					2.35E-07	6.44E-05	3.00E-06	1.12E-05
164	Transfer Conveyer No. 33	0.03	0.01					3.53E-07	9.65E-05	4.50E-06	1.68E-05
165	Transfer Conveyer No. 34	0.04	0.02					4.70E-07	1.29E-04	6.00E-06	2.24E-05
166	Transfer Conveyer No. 35	0.04	0.02					4.70E-07	1.29E-04	6.00E-06	2.24E-05
167	Transfer Conveyer No. 36	0.02	0.01					2.35E-07	6.44E-05	3.00E-06	1.12E-05
168	Transfer Conveyer No. 37	0.02	0.01					2.35E-07	6.44E-05	3.00E-06	1.12E-05
169	Transfer Conveyer No. 39	0.04	0.02					4.70E-07	1.29E-04	6.00E-06	2.24E-05
170	Transfer Conveyer No. 40	0.04	0.02					4.70E-07	1.29E-04	6.00E-06	2.24E-05
171	Transfer Conveyer No. 41	0.04	0.02					4.70E-07	1.29E-04	6.00E-06	2.24E-05
172	Transfer Conveyer No. 42	0.04	0.02					4.70E-07	1.29E-04	6.00E-06	2.24E-05
173	Conveyer No. 15	0.46	0.22								
174	Conveyer No. 16	0.44	0.21								
175	Conveyer No. 31	0.01	0.00								

3-M Industrial Minerals - Little Rock
Permit #: 39-AOP-R1
AFIN #: 60-00003

lb/hr

								HAPs from pigments only			
SN	**Source Description**	**PM**	**PM10**	**NOx**	**SO2**	**VOC**	**CO**	**lead**	**chromium**	**manganese**	**cobalt**
176	Conveyer 31A (Sodium Silicate Plant)	0.18	0.09					2.12E-06	5.79E-04	2.70E-05	1.01E-04
183	Pugmill	0.04	0.02								
184	Pugmill	0.03	0.01								
185	Pugmill	0.02	0.01								
186	Bucket Elevator No. 18	0.02	0.01					2.35E-07	6.44E-05	3.00E-06	1.12E-05
187	Bucket Elevator No. 19	0.02	0.01					2.35E-07	6.44E-05	3.00E-06	1.12E-05
188	Bucket Elevator No. 20	0.02	0.01					2.35E-07	6.44E-05	3.00E-06	1.12E-05
189	Bucket Elevator No. 24	2.40	2.40					2.82E-05	7.72E-03	3.60E-04	1.34E-03
190	Bucket Elevator No. 25	0.02	0.01					2.35E-07	6.44E-05	3.00E-06	1.12E-05
191	Bucket Elevator No. 27 (Sodium Silicate)	0.09	0.04					1.06E-06	2.90E-04	1.35E-05	5.04E-05
194	Finished Granule Storage/ Loading	0.05	0.03					5.88E-07	1.61E-04	7.50E-06	2.80E-05
195	Waste Granule Storage/ Loading	0.02	0.01					2.35E-07	6.44E-05	3.00E-06	1.12E-05
199	Product Bin P1	4.90	2.33					5.76E-05	1.58E-02	7.35E-04	2.74E-03
200	Product Bin P2	4.90	2.33					5.76E-05	1.58E-02	7.35E-04	2.74E-03
201	Product Bin P3	4.90	2.33					5.76E-05	1.58E-02	7.35E-04	2.74E-03
202	Product Bin P4	4.90	2.33					5.76E-05	1.58E-02	7.35E-04	2.74E-03
203	Product Bin P5	4.90	2.33					5.76E-05	1.58E-02	7.35E-04	2.74E-03
204	Product Bin P6	4.90	2.33					5.76E-05	1.58E-02	7.35E-04	2.74E-03
205	Product Bin P7	4.90	2.33					5.76E-05	1.58E-02	7.35E-04	2.74E-03
206	Product Bin P8	4.90	2.33					5.76E-05	1.58E-02	7.35E-04	2.74E-03
207	Waste Bin W21	2.94	1.40					3.46E-05	9.46E-03	4.41E-04	1.65E-03
208	Waste Bin W22	2.94	1.40					3.46E-05	9.46E-03	4.41E-04	1.65E-03
209	Waste Bin W23	2.94	1.40					3.46E-05	9.46E-03	4.41E-04	1.65E-03
210	Waste Bin W24	2.94	1.40					3.46E-05	9.46E-03	4.41E-04	1.65E-03
211	Covered Raw Granule Stockpile (BH)	1.37	1.37								
212	Conveyer No. 43	0.02	0.02								
213	Conveyer No. 44	0.02	0.02								
300	Train Car Unload	0.03	0.01								
301	Truck Loading at C & S Pugmill	0.07	0.04								
302	Mineral Unloading at Wet Stockpile	0.02	0.02								
303	Wet Stockpile Fugitives	1.05	1.05								
304	Train Car unload (Sodium Silicate)	0.09	0.04					1.06E-06	2.90E-04	1.35E-05	5.04E-05

3-M Industrial Minerals - Little Rock
Permit #: 39-AOP-R1
AFIN #: 60-00003

lb/hr

								HAPs from pigments only			
SN	**Source Description**	**PM**	**PM10**	**NOx**	**SO2**	**VOC**	**CO**	**lead**	**chromium**	**manganese**	**cobalt**
305	Truck Loading at Coloring Pugmill	0.05	0.03					5.88E-07	1.61E-04	7.50E-06	2.80E-05
306	Plant Vehicle Traffic/ BH waste haul off	8.92	1.74								
307	Temporary Storage Stock Pile Drop	7.52	3.58								
308	Raw Stock Pile	24.83	11.83								
310	Truck/ Railcar Loading	0.04	0.04								
	total pounds per hour	**281.16**	**196.14**	**48.02**	**75.97**	**1.21**	**62.22**	**1.25E-03**	**3.43E-01**	**1.60E-02**	**5.96E-02**

Tons Per Year

3-M Industrial Minerals - Little Rock
Permit #: 39-AOP-R1
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tpy

SN	Source Description	PM	PM10	NOx	SO2	VOC	CO	HAPs from pigments only			
								lead	chromium	manganese	cobalt
1	Tertiary Crushing Baghouse	11.26	11.26								
2	Transfer Tower	0.35	0.35								
3	Traylor Crusher	4.91	4.12								
4	Traylor Crusher Surge Bin	0.15	0.07								
5	No. 20 Conveyer	0.15	0.07								
6	Primary Screen	2.65	1.26								
7	A.C. Crusher	1.05	1.05								
8	Screen	2.65	1.26								
9	Cone Crusher	4.91	4.13								
10	No. 1 Crusher	0.40	0.40								
11	Transfer Station	0.15	0.40								
12	Load Out Bin	0.15	0.07								
13	Load Out Bin	0.15	0.07								
14	No. 3 Conveyer	0.15	0.07								
15	No. 3A Conveyer	0.15	0.07								
16	A.C. Crusher Surge Bin	0.15	0.07								
17	Tertiary Crushing Stock Pile	0.40	0.40								
18	Railroad Loadout	0.15	0.07								
19	Feeders	0.15	0.07								
20	No. 4 Conveyer	0.40	0.40								
28	No. 5 Conveyer	0.66	0.31								
29	No. 6 Conveyer	0.66	0.31								
30	Screen	2.65	1.26								
31	Crusher	1.86	0.89								
32	Screen	2.65	1.26								
33	Crusher	1.86	0.89								
50	Overburden Removal	56.94	27.38								
51	Drilling	1.18	0.57								
52	Blasting	0.24	0.12								
53	Blasting Explosive (ANFO)			12.75	1.50		50.25				
54	Quarry Truck Loading	1.49	0.70								
55	Quarry Truck Traffic	18.06	8.13								
57	Emergency Stockpile	1.79	1.79								

3-M Industrial Minerals - Little Rock
Permit #: 39-AOP-R1
AFIN #: 60-00003

tpy

SN	Source Description	PM	PM10	NOx	SO2	VOC	CO	HAPs from pigments only			
								lead	chromium	manganese	cobalt
58	Emergency Railroad Loadout	0.35	0.18								
59	Conveyer from AC Crusher	0.70	0.35								
60	Parallel Crusher	bubbled with SN-09									
61	No. 45 Conveyer	0.70	0.35								
62	No. 46 Conveyer	0.70	0.35								
101	Dryer Feed End (BH)	21.90	21.90								
102	C & S Line #1 (BH)	21.90	21.90								
103	C & S Line # 2 (BH)	21.90	21.90								
104	C & S Line #3 (BH)	21.90	21.90								
105	Filler Screen Baghouse	21.90	21.90								
106	Product Tripper and Storage Baghouse	21.90	21.90								
106A	Bin #6 Loadout Dust System	2.19	2.19								
107	Feeders	0.35	0.18								
108	Dryer No. 1 (BH)	21.91	21.91	34.62	10.98	1.62	7.17				
109	Conveyer J.B.	0.35	0.18								
110	No. 7 Filler Tank (BH)	4.38	4.38								
111	No. 1 Kiln (BH)	24.53	18.63	35.66	10.93	0.66	8.92	2.88E-04	7.89E-02	3.68E-03	1.37E-02
112	No. 2 Kiln (BH)	24.53	18.63	35.66	10.93	0.66	8.92	2.88E-04	7.89E-02	3.68E-03	1.37E-02
113	No. 3 Kiln (BH)	24.53	18.63	35.66	10.93	0.66	8.92	2.88E-04	7.89E-02	3.68E-03	1.37E-02
114	No. 2 Mixer (BH)	10.51	10.51					1.24E-04	3.38E-02	1.58E-03	5.89E-03
115	No. 1 Cooler (Cyclone)	21.02	21.02					2.47E-04	6.76E-02	3.15E-03	1.18E-02
116	Dryer No. 2 (BH)	35.04	18.65	17.26	10.88	0.31	4.32				
117	No. 1 Clay Tank (BH)	13.14	13.14								
118	No. 2 Clay Tank (BH)	13.14	13.14								
119	No. 3 Clay Tank (BH)	13.14	13.14								
120	Silica Bin	0.00	0.00					0.00E+00	0.00E+00	0.00E+00	0.00E+00
121	No. 21 Elevator	13.36	13.36					1.57E-04	4.30E-02	2.00E-03	7.48E-03
122	No. 22 Elevator	13.36	13.36					1.57E-04	4.30E-02	2.00E-03	7.48E-03
123	No. 23 Elevator	13.36	13.36					1.57E-04	4.30E-02	2.00E-03	7.48E-03
124	Coloring Feed End (BH)	21.90	21.90								
125	Waste Conveyer Baghouse	13.14	13.14					1.55E-04	4.23E-02	1.97E-03	7.36E-03
128	No. 3 Mixer (BH)	10.51	10.51					1.24E-04	3.38E-02	1.58E-03	5.89E-03

3-M Industrial Minerals - Little Rock
Permit #: 39-AOP-R1
AFIN #: 60-00003

tpy

SN	Source Description	PM	PM10	NOx	SO2	VOC	CO	HAPs from pigments only			
								lead	chromium	manganese	cobalt
129	No. 1 Mixer (BH)	10.51	10.51					1.24E-04	3.38E-02	1.58E-03	5.89E-03
130	Sodium Silicate Plant Boiler	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
131	Screen No. 25	1.14	0.57					1.34E-05	3.66E-03	1.71E-04	6.38E-04
132	Screen No. 26	1.14	0.57					1.34E-05	3.66E-03	1.71E-04	6.38E-04
133	Screen No. 29	1.14	0.57					1.34E-05	3.66E-03	1.71E-04	6.38E-04
134	Screen No. 28	1.14	0.57					1.34E-05	3.66E-03	1.71E-04	6.38E-04
135	Screen No. 27	1.14	0.57					1.34E-05	3.66E-03	1.71E-04	6.38E-04
150	IC Circuit - Silo #1(BH)	1.31	1.31								
151	IC Circuit - Silo #2 (BH)	4.82	4.82								
152	IC Circuit - Silo #3 (BH)	3.50	3.50								
153	Waste Raw Granule (BH)	10.63	10.63								
154	No. 2 Cooler (Cyclone)	21.02	21.02					2.47E-04	6.76E-02	3.15E-03	1.18E-02
155	No. 3 Cooler (Cyclone)	21.02	21.02					2.47E-04	6.76E-02	3.15E-03	1.18E-02
156	Conveyer No. 1	9.77	4.64								
157	Conveyer No. 2	10.29	4.91								
158	Transfer Conveyer No. 20	0.09	0.04					1.03E-06	2.82E-04	1.31E-05	4.91E-05
159	Transfer Conveyer No. 21	0.88	0.04					1.03E-05	2.82E-03	1.31E-04	4.91E-04
160	Transfer Conveyer No. 22	0.44	0.00					5.15E-06	1.41E-03	6.57E-05	2.45E-04
161	Transfer Conveyer No. 23	0.18	0.09					2.06E-06	5.64E-04	2.63E-05	9.81E-05
162	Transfer Conveyer No. 24	0.18	0.09					2.06E-06	5.64E-04	2.63E-05	9.81E-05
163	Transfer Conveyer No. 25	0.09	0.04					1.03E-06	2.82E-04	1.31E-05	4.91E-05
164	Transfer Conveyer No. 33	0.13	0.04					1.55E-06	4.23E-04	1.97E-05	7.36E-05
165	Transfer Conveyer No. 34	0.18	0.09					2.06E-06	5.64E-04	2.63E-05	9.81E-05
166	Transfer Conveyer No. 35	0.18	0.09					2.06E-06	5.64E-04	2.63E-05	9.81E-05
167	Transfer Conveyer No. 36	0.09	0.04					1.03E-06	2.82E-04	1.31E-05	4.91E-05
168	Transfer Conveyer No. 37	0.09	0.04					1.03E-06	2.82E-04	1.31E-05	4.91E-05
169	Transfer Conveyer No. 39	0.18	0.09					2.06E-06	5.64E-04	2.63E-05	9.81E-05
170	Transfer Conveyer No. 40	0.18	0.09					2.06E-06	5.64E-04	2.63E-05	9.81E-05
171	Transfer Conveyer No. 41	0.18	0.09					2.06E-06	5.64E-04	2.63E-05	9.81E-05
172	Transfer Conveyer No. 42	0.18	0.09					2.06E-06	5.64E-04	2.63E-05	9.81E-05
173	Conveyer No. 15	2.01	0.96								
174	Conveyer No. 16	1.93	0.92								
175	Conveyer No. 31	0.04	0.00								

3-M Industrial Minerals - Little Rock
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tpy

SN	Source Description	PM	PM10	NOx	SO2	VOC	CO	HAPs from pigments only			
								lead	chromium	manganese	cobalt
176	Conveyer 31A (Sodium Silicate Plant)	0.79	0.39					9.27E-06	2.54E-03	1.18E-04	4.42E-04
183	Pugmill	0.18	0.09								
184	Pugmill	0.13	0.04								
185	Pugmill	0.09	0.04								
186	Bucket Elevator No. 18	0.09	0.04					1.03E-06	2.82E-04	1.31E-05	4.91E-05
187	Bucket Elevator No. 19	0.09	0.04					1.03E-06	2.82E-04	1.31E-05	4.91E-05
188	Bucket Elevator No. 20	0.09	0.04					1.03E-06	2.82E-04	1.31E-05	4.91E-05
189	Bucket Elevator No. 24	10.51	10.51					1.24E-04	3.38E-02	1.58E-03	5.89E-03
190	Bucket Elevator No. 25	0.09	0.04					1.03E-06	2.82E-04	1.31E-05	4.91E-05
191	Bucket Elevator No. 27 (Sodium Silicate)	0.39	0.18					4.64E-06	1.27E-03	5.91E-05	2.21E-04
194	Finished Granule Storage/ Loading	0.22	0.13					2.58E-06	7.05E-04	3.29E-05	1.23E-04
195	Waste Granule Storage/ Loading	0.09	0.04					1.03E-06	2.82E-04	1.31E-05	4.91E-05
199	Product Bin P1	21.46	10.21					2.52E-04	6.91E-02	3.22E-03	1.20E-02
200	Product Bin P2	21.46	10.21					2.52E-04	6.91E-02	3.22E-03	1.20E-02
201	Product Bin P3	21.46	10.21					2.52E-04	6.91E-02	3.22E-03	1.20E-02
202	Product Bin P4	21.46	10.21					2.52E-04	6.91E-02	3.22E-03	1.20E-02
203	Product Bin P5	21.46	10.21					2.52E-04	6.91E-02	3.22E-03	1.20E-02
204	Product Bin P6	21.46	10.21					2.52E-04	6.91E-02	3.22E-03	1.20E-02
205	Product Bin P7	21.46	10.21					2.52E-04	6.91E-02	3.22E-03	1.20E-02
206	Product Bin P8	21.46	10.21					2.52E-04	6.91E-02	3.22E-03	1.20E-02
207	Waste Bin W21	12.88	6.13					1.51E-04	4.14E-02	1.93E-03	7.21E-03
208	Waste Bin W22	12.88	6.13					1.51E-04	4.14E-02	1.93E-03	7.21E-03
209	Waste Bin W23	12.88	6.13					1.51E-04	4.14E-02	1.93E-03	7.21E-03
210	Waste Bin W24	12.88	6.13					1.51E-04	4.14E-02	1.93E-03	7.21E-03
211	Covered Raw Granule Stockpile (BH)	6.00	6.00								
212	Conveyer No. 43	0.09	0.09								
213	Conveyer No. 44	0.09	0.09								
300	Train Car Unload	0.13	0.04								
301	Truck Loading at C & S Pugmill	0.31	0.18								
302	Mineral Unloading at Wet Stockpile	0.09	0.09								
303	Wet Stockpile Fugitives	4.60	4.60								
304	Train Car unload (Sodium Silicate)	0.39	0.18					4.64E-06	1.27E-03	5.91E-05	2.21E-04

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tpy

SN	Source Description	PM	PM10	NOx	SO2	VOC	CO	HAPs from pigments only			
								lead	chromium	manganese	cobalt
305	Truck Loading at Coloring Pugmill	0.22	0.13					2.58E-06	7.05E-04	3.29E-05	1.23E-04
306	Plant Vehicle Traffic/ BH waste haul off	8.36	1.63								
307	Temporary Storage Stock Pile Drop	32.94	15.68								
308	Raw Stock Pile	49.01	23.34								
310	Truck/ Railcar Loading	0.18	0.18								
	total tons per year	992.86	719.89	171.61	56.15	3.91	88.50	5.49E-03	1.50E+00	7.00E-02	2.61E-01

HAPs

3-M Industrial Minerals - Little Rock
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HAPs

The following table lists naturally occurring hazardous air pollutants. These emissions result from operations involving mined material and the naturally occurring, structurally bound elements within the material. The following table does not include HAPs from pigments which are addressed separately in this permit. Compliance is demonstrated by compliance with the PM emission rates.

Hazardous Air Pollutant	weight fraction of PM	lb/hr*	tpy
lead	5.40E-06	0.0015	0.0054
arsenic	1.30E-06	0.0004	0.2840
beryllium	1.80E-06	0.0005	0.0018
cadmium	4.00E-07	0.0001	0.0947
manganese	6.00E-04	0.1687	2.4884

* Emission rate is a fraction of the lb/hr PM emission rate at each source

The following table includes the naturally occurring HAPs from the previous table and the HAPs from pigments to result in the total plantwide pounds per hour and tons per year of HAPs.

Hazardous Air Pollutant	plantwide lb/hr	plantwide tpy
lead	0.0028	0.0108
chromium	0.3427	1.5009
arsenic	0.0004	0.2840
beryllium	0.0005	0.0018
cadmium	0.0001	0.0947
manganese	0.1847	2.5584
cobalt	0.0596	0.2612

APPENDIX B

40 CFR 60, Subpart "OOO" Determination from EPA Region 6

APPENDIX C

Compliance Forms

3M Industrial Mineral Products

AFIN: 60-00003, 39-AOP-R1

Arch Street Throughput

Specific Conditions 5 and 6

Monthly Throughput Records

Month	Monthly Throughput at Arch Street	12 mo Total (Limit: 3,000,000 tons)
March 02		(1)
April 02		(1)
May 02		(1)
June 02		(1)
July 02		(1)
August 02		(1)
September 02		(1)
October 02		(1)
November 02		(1)
December 02		(1)
January 03		(1)
February 03		

(1) Consecutive 12- Month Totals Not Required For The First Eleven Months Of The Title V Permit.

3M Industrial Mineral Products

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SN-108, 111, 112, 113, and 116

Specific Conditions 28, 29, and 31

Monthly Dryer and Kiln Diesel Records

Month	Maximum Sulfur Content, Limit: 0.3 %	Monthly Total, gal	12 mo Total(Limit: 2,500,000 gal)
March 02			(1)
April 02			(1)
May 02			(1)
June 02			(1)
July 02			(1)
August 02			(1)
September 02			(1)
October 02			(1)
November 02			(1)
December 02			(1)
January 03			(1)

February 03			

(1) Consecutive 12- Month Totals Not Required For The First Eleven Months Of The Title V Permit.

3M Industrial Mineral Products

AFIN: 60-00003 39-AOP-R1

Scrubber Liquid Flow Rate

Specific Condition 37

Daily Flow Checks

Date	Scrubber Flow (Minimum Flow Determined by Compliance Test)		
	Cooler Scrubber #1 (SN-115) Minimum Flow = _____	Cooler Scrubber #2 (SN-154) Minimum Flow = _____	Cooler Scrubber #3 (SN-155) Minimum Flow = _____

APPENDIX D

ADEQ CEMs Conditions

Request for PDS Invoice	
Invoice Number *(assigned when invoice printed)*	PDS-

AFIN r	60-00003			
Name *(for confirmation only)*	3M Industrial Mineral Products			
Invoice Type (pick one) r		Minor Mod		
Permit Number r	0039-AOP-R1			
Media Code r	A			
Fee Code or Pmt Type r	T5			
Fee Description *(for confirmation only)*	Title V			
Amount Due r *(whole dollar amount only)*	$500			
Printed Comment *(600 characters maximum)*	minor mod minimum fee			

Note: The information below is for use by the requesting division if desired; it will not print on the invoice.	
	Bryan Leamons

Paid? (yes/no)	
Check number	
Comments	

r **Required data***(See "g:\Misc\PDS_FeeCodes.wpd" for descriptions and discussions of fee codes)*

Request submitted by:	Bryan Leamons	Date:	

Public Notice

Pursuant to the Arkansas Operating Air Permit Program (Regulation #26) Section 602, the Air Division of the Arkansas Department of Environmental Quality gives the following notice:

3M Industrial Mineral Products operates a rock quarry at 65th and Arch Street and operates a Roofing Granule Plant at Hwy 365 and Walters Drive, Little Rock, Arkansas 72216. 3M has applied for minor modification to their existing Title V Operating Air Permit (AFIN: 60-00003). Upon final approval by the Department, the permit modification will allow 3M to use alternate coloring materials at the Granule Plant. Resulting emissions changes will be a potential increase of cobalt compounds by 0.26 tons per year.

The application has been reviewed by the staff of the Department and has received the Department's tentative approval subject to the terms of this notice.

Citizens wishing to examine the permit application and staff findings and recommendations may do so by contacting Doug Szenher, Public Affairs Supervisor. Citizens desiring technical information concerning the application or permit should contact Bryan Leamons, Engineer. Both Doug Szenher and Bryan Leamons can be reached at the Department's central office, 8001 National Drive, Little Rock, Arkansas 72209, telephone: (501) 682-0744.

The draft permit and permit application are available for copying at the above address. A copy of the draft permit has also been placed at the Little Rock Public Library, 100 South Rock St., Little Rock, Arkansas 72201. This information may be reviewed during normal business hours.

Interested or affected persons may also submit written comments or request a hearing on the proposal, or the proposed modification, to the Department at the above address - Attention: Doug Szenher. In order to be considered, the comments must be submitted within thirty (30) days of publication of this notice. Although the Department is not proposing to conduct a public hearing, one will be scheduled if significant comments on the permit provisions are received. If a hearing is scheduled, adequate public notice will be given in the newspaper of largest circulation in the county in which the facility in question is, or will be, located.

The Director shall make a final decision to issue or deny this application or to impose special conditions in accordance with Section 2.1 of the Arkansas Pollution Control and Ecology Commission's Administrative Procedures (Regulation #8) and Regulation #26.

Dated this

Marcus C. Devine
Director