

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY

NO DISCHARGE INDUSTRIAL PERMIT INSPECTION FORM

AFIN: 60-00003 Log No.: 076715  
Permit No.: 4584-WR-2 Inspection Date: 02/13/2014  
Media: Water Inspector: Risa Parker

Compliance Status:  IN /  OUT

1A. Name of Facility: 3M Company  
Address: 3110 Walters Road, Little Rock, AR 72206 (PO Box 165860, Little Rock, AR 72216)  
County: Pulaski

2A. Name of On-Site Representative: Steven Srebalus, EHS Technologist

3A. Name of Responsible Official: Russ Bryan  
Address: PO Box 165860, Little Rock, AR 72216 Telephone: 501-490-1509

4A. Parent Company: N/A  
Address: \_\_\_\_\_ Telephone: \_\_\_\_\_

5A. Description of Process (including type of industry, materials produced, and major by-products): Per the permit Statement of Basis: "The 3M Company College Station produces roofing granules by crushing the rock and screening the rock to the appropriate size. A byproduct of this operation is the wastewater produced from the washdown of equipment, scrubber blowdown, water treatment system blowdown and stormwater. All of the waste flow to a 600,000 (operating capacity) gallon concrete storage basin with a 1 foot 6 inch freeboard..."

6A. Any complaints registered against this permitted facility?  Yes  No  
If yes, give date and description of complaint: \_\_\_\_\_

7A. Are there any additions, modifications, or corrections to the facility since the last inspection?  Yes  No  
If yes, explain: Effective date of current permit 11/01/2012.

1B. Furnish a simplified flow diagram of the treatment system and include main components, flow sequence through plant, and calculated or estimated flows.

(See June 25, 2012 Waste Management Plan)

2B. Nearest Stream: Fourche Bayou Creek

3B. Does wastewater from this facility cause adverse effect on the waters of the State:  
 Yes  No

**Comments:** The potential exists for adverse effect on the waters of the State.

4B. Are operating records kept as required by permit?  Yes  No  N/A  
 If no, explain: \_\_\_\_\_

5B. Are maintenance records kept as required by permit?  Yes  No  N/A  
 If no, explain: \_\_\_\_\_

6B. Are Samples routinely taken?  Yes  No  N/A

7B. Does the sampling program meet the requirements of the permit?  
 Yes  No  N/A  
 If no, explain: \_\_\_\_\_

8B. What laboratory does the facility use? American Interplex  
 Address: 8600 Kanis Road, Little Rock, AR 72204 Telephone: 501-224-5060

1C. Do laboratory procedures and records meet the requirements of the permit?  
 Yes  No  N/A  
 If no, explain: \_\_\_\_\_

2C. Is contaminated runoff a problem? See comments.  Yes  No  N/A  
**Comments:** The potential exists for contaminated runoff to be a problem.

3C. Is sludge disposal required?  Yes  No  N/A  
 If yes, describe (including final destination): Per Steven Srebalus, sludge is ultimately landfilled in Saline County.

4C. Is the treatment system being properly operated and maintained as required by permit?  
 Yes  No  N/A  
 If no, explain See summary of findings.

SUMMARY OF FINDINGS/COMMENTS

**Solids/sludges were observed to be placed in a manner which is not accordance with:**

- 1) Part III.12 of the permit which states: "Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering the waters of the State."**
- 2) The Arkansas Water and Air Pollution Control Act [(A.C.A. § 8-4-217(a)(2)] which states, "It shall be unlawful for any person to place or cause to be placed any sewage, industrial waste, or other wastes in a location where it is likely to cause pollution of any waters of this state."**

**A written response detailing the corrective action taken to address the above-referenced items is required.**

Inspector Signature:  Date of Report: 02/19/2014

Signature of Reviewer:  Date of Review: 2/21/2014

**Water Division No Discharge Industrial Photographic Evidence Sheet**

<b>Location:</b>	3M Company						
<b>Photographer:</b>	Risa Parker, Water Division			<b>Witness:</b>	Steven Srebalus, EHS Technologist		
<b>Photo #</b>	1	<b>Of</b>	5	<b>Date:</b>	02/13/2014	<b>Time:</b>	10:53 am
<b>Description:</b>	Sludge/solids						



<b>Photographer:</b>	Risa Parker, Water Division			<b>Witness:</b>	Steven Srebalus, EHS Technologist		
<b>Photo #</b>	2	<b>Of</b>	5	<b>Date:</b>	02/13/2014	<b>Time:</b>	10:09 am
<b>Description:</b>	Sludge/solids						



<b>Water Division No Discharge Industrial Photographic Evidence Sheet</b>							
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<b>Location:</b>	3M Company						
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<b>Photographer:</b>	Risa Parker, Water Division			<b>Witness:</b>	Steven Srebalus, EHS Technologist		
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<b>Photo #</b>	3	<b>Of</b>	5	<b>Date:</b>	02/13/2014	<b>Time:</b>	10:20 am
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<b>Description:</b>	Sludge/solids						
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<b>Photographer:</b>	Risa Parker, Water Division			<b>Witness:</b>	Steven Srebalus, EHS Technologist		
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<b>Photo #</b>	4	<b>Of</b>	5	<b>Date:</b>	02/13/2014	<b>Time:</b>	10:17 am
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<b>Description:</b>	Sludge/solids						
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<b>Water Division No Discharge Industrial Photographic Evidence Sheet</b>							
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<b>Location:</b>	3M Company						
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<b>Photographer:</b>	Risa Parker, Water Division			<b>Witness:</b>	Steven Srebalus, EHS Technologist		
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<b>Photo #</b>	5	<b>Of</b>	5	<b>Date:</b>	02/13/2014	<b>Time:</b>	10:10 am
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<b>Description:</b>	Sludge/solids						
---------------------	---------------	--	--	--	--	--	--



**From:** [Parker, Risa](#)  
**To:** [McConnell, Melissa](#)  
**Subject:** FW: 3M Little Rock Compliance Inspection AFIN# 60-00003, Permit# 4584-WR-2 Summary of Findings  
**Date:** Tuesday, March 04, 2014 3:20:09 PM

Please add to Water ID 13307.

**From:** Parker, Risa  
**Sent:** Tuesday, March 04, 2014 11:27 AM  
**To:** 'sssrebalus@mmm.com'  
**Cc:** Ungerank, Colby  
**Subject:** RE: 3M Little Rock Compliance Inspection AFIN# 60-00003, Permit# 4584-WR-2 Summary of Findings

Steven:

Solids/sludges (material) outside the retention wall corresponds to Summary of Findings #1.

The placement of the solids/sludges in their entirety corresponds to Summary of Findings #2.

*Risa Parker  
District 9 Field Inspector  
ADEQ Water Division  
5301 Northshore Drive  
North Little Rock, AR 72118-5317  
501.682.0658  
[parkerr@adeq.state.ar.us](mailto:parkerr@adeq.state.ar.us)*

**From:** [sssrebalus@mmm.com](mailto:sssrebalus@mmm.com) [<mailto:sssrebalus@mmm.com>]  
**Sent:** Monday, March 03, 2014 7:32 AM  
**To:** Parker, Risa  
**Cc:** [krowe@mmm.com](mailto:krowe@mmm.com); [runsick@mmm.com](mailto:runsick@mmm.com)  
**Subject:** 3M Little Rock Compliance Inspection AFIN# 60-00003, Permit# 4584-WR-2 Summary of Findings

Risa,

3M Little Rock received the compliance inspection summary and we need some clarification on the two items in the summary for permit 4584WR2. We are in the process of correcting the issues and to ensure that our reply back to ADEQ is correct we need to check our understanding of the Summary of Findings. Our understanding was that:

1. Material was being stacked to high near the concrete retention wall and some had spilled to the other side
2. Seepage from the sludge drying process had escaped from under the berm and made its way off the north side of the concrete pad.

Did I state this correctly and if so, which one of the above items matches the 2 findings listed in the summary below?

## SUMMARY OF FINDINGS/COMMENTS

**Solids/sludges were observed to be placed in a manner which is not accordance with:**

- 1) Part III.12 of the permit which states: "Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering the waters of the State."**
- 2) The Arkansas Water and Air Pollution Control Act [(A.C.A. § 8-4-217(a)(2)] which states, "It shall be unlawful for any person to place or cause to be placed any sewage, industrial waste, or other wastes in a location where it is likely to cause pollution of any waters of this state."**

Let met know,

Steven Srebalus  
EHS Technologist  
3M Little Rock, AR  
800-245-8018  
Triminet 8-564-1124  
Cell 501-944-9835

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3M Industrial Mineral Products 3M  
P O Box 165860  
Little Rock, AR 72216 - 5860  
Phone (501) 490-1509

March 13, 2014



Arkansas Department of Environmental Quality  
Water Division, Inspection Branch  
5301 North Shore Drive  
No. Little Rock, Arkansas 72118-5317  
Water-Inspection-Report@ADEQ.State.AR.US

RECEIVED

MAR 13 2014

Kn 2:55

RE: 3M Company - College Station Granule Plant  
3M Response to ADEQ Compliance Inspection Report  
AFIN 60-00003; Permit Number: ARG250015; ARR00B541; 4584-WR-2

Dear Risa Parker:

In response to the Arkansas Department of Environmental Quality (ADEQ) site compliance inspection summarized in the ADEQ letter dated February 24, 2014, 3M has prepared these responses to ADEQ.

The inspection issues and associated responses are listed below:

**ADEQ Permit ARR00B541 Issue No. 1:**

*"Sediment accumulation was observed in the receiving water. This is in violation of the Arkansas Water and Air Pollution Control Act [(A.C.A. §8-4-217(a)(2))] which states, "It shall be unlawful for any person to place or cause to be placed any sewage, industrial waste, or other wastes in a location where it is likely to cause pollution of any waters of this state.""*

**3M Response:** ADEQ and 3M have been working together to improve the site stormwater runoff quality and 3M has developed and implemented best practical technology controls to improve the site solids management. In May 1999, in order to implement stormwater remedial actions, ADEQ and 3M entered into Consent Administrative Order (CAO) LIS No. 99-129-100 (enclosed as Attachment A) defining "waters of the state for permitting purposes" in item 4 of the Order and Agreement. The Order and Agreement section item 4 states:

*"ADEQ expressly finds the "waters of the state" for NPDES permitting purposes to begin at approximately Latitude 34 degrees 42' 36" North, Longitude 92 degrees 14' 11" West, at the confluence of the drainage ditch from the Permittees's property with an unnamed tributary to Fourche Creek, as depicted on Attachment 2, attached hereto and incorporated herein by reference."*



**3M Industrial Mineral Products** 3M  
P O Box 165860  
Little Rock, AR 72216 – 5860  
Phone (501) 490-1509

The referenced point of permit compliance has been designated by ADEQ as Stormwater Outfall 101. Based on this agreement and ADEQ approved stormwater management practices that utilize site drainages as part of the solids control measures, 3M has and does use and maintain the site ditches, upstream of Stormwater Outfall 101, to help capture solids. The 3M site stormwater management procedures include inspecting and maintaining the site ditch basins upstream and downstream of the point of compliance. The sediment referenced in this finding observed by ADEQ during their inspection was in Main Ditch Basin 1, far upstream from the agreed upon Stormwater Outfall 101.

As the ADEQ inspector observed when reviewing 3M's stormwater inspection records, 3M had identified sediment in the Main Ditch Basin 1 in their 2013 4<sup>th</sup> quarter stormwater inspection with a corrective action to remove the solids by the end of the 1<sup>st</sup> quarter in 2014 as part of the BMP maintenance program. See Section E No. 15 of 3M's stormwater inspection report in Attachment B. This work is scheduled to be completed by March 31, 2014.

For the reasons listed above 3M does not believe the sediment accumulation observed during the inspection is in violation of Arkansas Water and Air Pollution Control Act [(A.C.A. §8-4-217(a)(2))] as cited in the ADEQ Water Division Inspection Report.

**ADEQ Permit ARR00B541 Issue No. 2:**

*Sediment accumulation observed where it will flow into the drain system. This is in violation of Part 6.17 of the permit.*

**3M Response:** Although the ADEQ inspector observed sediment accumulated on the steel grating draining into Trap 2, the sediment/rock fines were up gradient of sediment trap (Trap 2) which is designed to capture this type of material. Trap 2 then discharges into the site ditch consisting of a series of 3 sediment basins (Basin 1 was mentioned previously in finding 1). Again, all 3 basins are on 3M property upstream of Stormwater Outfall 101. These sediment basins and all primary traps (including Trap 2) are inspected and maintained. The accumulated sediment observed by ADEQ of accumulated sediment has been cleaned up. A photograph showing the corrective action is the first photo in Attachment C for your review.

**ADEQ Permit 4584-WR-2 Issue No. 1:**

*1) Part III.12 of the permit which states: "Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering the waters of the state."*

**3M Response:** 3M's dewatering of the sediment from the process water treatment system did have the potential for minor amounts of solids and liquids to migrate from the dewatering pad. 3M has initiated controls to prevent solids and liquids from leaving the dewatering pad by adding a temporary berm on and along the open edge of the concrete

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P O Box 165860  
Little Rock, AR 72216 – 5860  
Phone (501) 490-1509

pad (see the second photo in Attachment C) and initiated improved management practices. Additionally, 3M's engineers are investigating longer term solutions to better control and manage this operation.

**ADEQ Permit 4584-WR-2 Issue No. 2:**

*The Arkansas Water and Air Pollution Control Act [A.C.A. 8-4-217(a)(2)] which states, "It shall be unlawful for any person to place or cause to be placed any sewage, industrial waste, or other wastes in a location where it is likely to cause pollution of any waters of this state."*

**3M Response:** Solids were observed during the inspection on top of and over the containment wall as pictured in the ADEQ inspection report. This material has been cleaned up and operations personnel have been instructed to keep basin solids within the dewatering pad. A photo of the cleaned up area is provided as the last photo in Attachment C. As mentioned above, 3M has initiated controls to prevent solids and liquids from migrating off the dewatering pad by adding a temporary berm on and along the open edge of the concrete pad and to prevent them from entering the waters of the state.

Also, per your request, the day-to-day procedure for the storage and handling of the sludge/solids on the slab is provided in Attachment D.

If you have any questions or need further information please call me at (501) 490 1509 Ext. 124 or Russ Bryan at (501) 490-1509 Ext. 157.

Respectfully submitted,



Mr. Steven Srebalus  
EHS Technologist  
3M Little Rock

# Attachment A

**ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY**

**IN THE MATTER OF:**

**MINNESOTA MINING AND  
MANUFACTURING COMPANY  
LITTLE ROCK, ARKANSAS**

**LIS NO. 99-129**

**CONSENT ADMINISTRATIVE ORDER**

This Consent Administrative Order (hereinafter "Order") is issued pursuant to the authority of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended; Ark. Code Ann. §8-4-101 et seq.) and the regulations issued thereunder (hereinafter collectively referred to as "the Act").

Pursuant to the authority of Ark. Code Ann. §8-4-207(1)(B), the Director of the Arkansas Department of Environmental Quality (hereinafter "ADEQ") is authorized to set schedules of compliance for facilities permitted under the Act necessary to assure compliance with both applicable state and federal effluent limitations, including those mandated by Sections 301(b)(1)(C) and 301(i)(1) of the Federal Clean Water Act and those necessary to achieve and maintain compliance with Arkansas Water Quality Standards (Regulation Number 2).

The issues herein having been settled by the agreement of Minnesota Mining & Manufacturing (hereinafter the "Permittee") and ADEQ, it is hereby agreed and stipulated that the following **FINDINGS OF FACT** and **ORDER AND AGREEMENT** be entered

herein.

### FINDINGS OF FACT

1. The Permittee is a corporation duly incorporated under the laws of the state of Delaware and is authorized to conduct business in the state of Arkansas. The Permittee has operated a roofing granule plant at its facility in Little Rock, Pulaski County, Arkansas since April 21, 1947. The Permittee operates a wastewater treatment unit pursuant to National Pollutant Discharge Elimination System ("NPDES") Permit No. AR0001686 (hereinafter "the Permit").
2. On or about June 3, 1986, the Permittee applied to Region VI of the U.S. Environmental Protection Agency to renew the Permit. On November 1, 1986, ADEQ received authority from the U.S. Environmental Protection Agency to administer the NPDES permit program. A permit issued by the ADEQ has the same force and effect as if it were issued by the U.S. Environmental Protection Agency. Pursuant to Section 7 of the Arkansas Pollution Control & Ecology Commission Regulation Number 6, the Permittee continues to operate according to the prior Permit until the Permit is renewed. On or about October 14, 1992, the Permittee filed a second application to renew the Permit. On or about June 6, 1995, the Permittee filed a third application to renew the Permit. The Permittee has not received a renewed NPDES Permit.
3. As part of the operation, the Permittee also operates under Permit No. ARR00B541, the Arkansas General Permit to Discharge Storm Water Associated with Industrial Activity, (hereinafter "the Storm Water Permit"). The Permittee has filed its Notice of Intent on

September 27, 1992, and subsequently prepared the required Storm Water Pollution Prevention Plan.

4. On or about November 9, 1995, May 19, 1997, and April 23, 1998, inspectors from ADEQ reported releases of solids in the storm water, sedimentation in culverts, and the need of further operational and maintenance steps. As a result of the inspections and requests for remedial actions, the Permittee has taken steps to reduce solids loading in stormwater runoff from its property. However, ADEQ and the Permittee agree that solids loading in the stormwater runoff need to be reduced further.

5. Without admitting or denying the foregoing Findings of Fact and the truth or falsity of any allegations or issues currently in dispute, the Permittee and the ADEQ wish to avoid the costs and uncertainty that would be involved in litigating this matter and agree to settle and resolve the questions at issue by entering into this Consent Administrative Order.

## ORDER AND AGREEMENT

Therefore, the parties do hereby stipulate and agree that:

1. Within 30 days of the effective date of this Order, the Permittee will commence work on corrective actions listed in the Permittee's Corrective Action Plan. These actions are designed to reduce or eliminate solids loading in stormwater runoff and includes a schedule to monitor progress on each step of the Plan, with milestone deadlines for certain specific events. The Corrective Action Plan is attached hereto as Attachment 1 and incorporated herein by reference. Failure to comply with the endpoint of the schedule shall be subject to the penalties contained in paragraph 6 below. It is the intent of the parties to complete the corrective actions for this facility within three years following the effective date of this Order.
2. The Permittee shall establish a baseline for stormwater solids loading to validate reduction of solids from the site attributable to the Corrective Action Plan.
3. ADEQ plans to submit for public notice NPDES Permit Number AR0001686 within 60 days of entry of this Order. Nothing in this Order shall diminish the compliance requirements of any current or future NPDES Permit.
4. ADEQ expressly finds the "waters of the state" for NPDES permitting purposes to begin at approximately Latitude 34°42' 36" North, Longitude 92°14'11" West, at the confluence of the drainage ditch from the Permittee's property with an unnamed tributary to Fourche Creek, as depicted on Attachment 2, attached hereto and incorporated herein by reference.
5. All submittals required by this Order are subject to approval by ADEQ. In the event

of any deficiency, the Permittee shall within fifteen (15) days of notification by ADEQ submit any additional information requested. Failure to submit a bona fide response to the notice of deficiency within fifteen (15) days constitutes a failure to meet a deadline and is subject to the stipulated civil penalties established in paragraph 6 below.

6. Failure to meet any milestone deadline of this Order constitutes a violation of said Order. If the Permittee should fail to meet any such milestone deadline, ADEQ, at its discretion, may assess stipulated civil penalties according to the following schedule:

- |   |                  |
|---|------------------|
| (a) First day through the tenth day:        | \$100.00 per day |
| (b) Eleventh day through the twentieth day: | \$200.00 per day |
| (c) Twenty-first day through thirtieth day: | \$300.00 per day |
| (d) Each day beyond the thirtieth day:      | \$500.00 per day |

These civil penalties for delay in performance shall be in addition to any other remedies or sanctions which may be available to ADEQ by reason of the Permittee's failure to comply with the requirements of this Order.

7. If any event, including but not limited to an act of nature, occurs which causes or may cause a delay in the achievement of compliance by the Permittee with the milestone deadlines of this Order, the Permittee shall so notify ADEQ, in writing, as soon as reasonably possible after it is apparent that a delay will result, but in no case after the due dates specified in the Permittee's milestone schedule. The notification shall describe in detail the anticipated length of the delay, the precise cause of the delay, the measures being taken and to be taken to minimize the delay, and the timetable by which those



measures will be implemented.

8. ADEQ may grant an extension of any provision of this Order, provided that the Permittee requests such an extension in writing and provided that the delay or anticipated delay has been or will be caused by circumstances beyond the control of and without the fault of the Permittee. The time for performance may be extended for a reasonable period but in no event longer than the period of delay resulting from such circumstances. The burden of proving that any delay is caused by circumstances beyond the control of and without the fault of the Permittee and the length of the delay attributable to such circumstances shall rest with the Permittee. Failure to notify the ADEQ promptly, as provided in paragraph 5 of this section, shall be grounds for a denial of an extension.

9. This Order shall be effective upon the Director's signature. This Order is subject to public review and comment. ADEQ retains the right to rescind this Order based upon the comments received within the thirty-day public comment period, provided that such right of rescission is exercised no later than thirty-days after the close of the public comment period. Notwithstanding the public notice stipulation, work on the corrective actions specified in the Corrective Action Plan shall be initiated immediately.

10. As provided by Arkansas Pollution Control & Ecology Commission Regulation Number 8, this matter is subject to being reopened upon Commission initiative or in the event a petition to set aside this Order is granted by the Commission.

11. Nothing in this Order shall be construed as a waiver by ADEQ of its enforcement authority over any violations not specifically addressed herein. This Order does not exonerate the Permittee from any past, present, or future conduct which is not expressly

addressed herein, nor does it relieve the Permittee of its responsibilities for obtaining any necessary permits. The successful completion of the corrective actions listed in the Corrective Action Plan attached to this Order will resolve all issues addressed by this Order.

12. This Order shall not be amended except by written agreement of both ADEQ and the Permittee.

SO ORDERED THE 26<sup>th</sup> DAY OF May, 1999.

Randall Mathis  
Randall Mathis, Director

APPROVED AS TO FORM AND CONTENT:

MINNESOTA MINING & MANUFACTURING

BY: Thomas E. Niccum  
(Signature)

Thomas E. Niccum  
(Typed or printed name)

TITLE: Division Vice President

DATE: 5/20/99

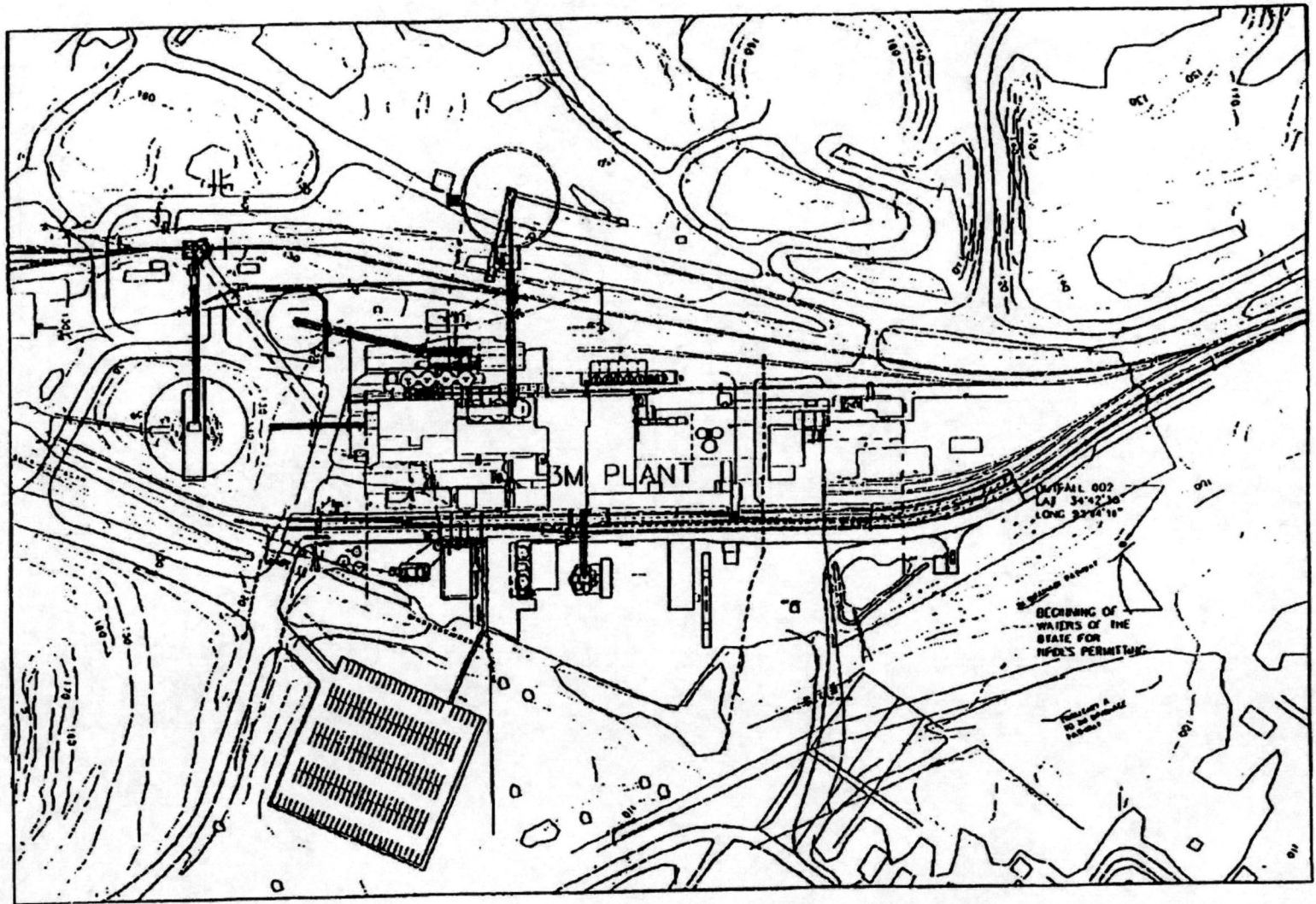
**Corrective Action Plan  
3M Little Rock Roofing Granule Facility  
Stormwater Permit No. ARR00B541**

<b>NPDES Action Item List</b>	<b>Interim Event Target Completion Schedule</b>
1) Preliminary design of Phase 1 sedimentation and Stormwater management Controls	
a) Topographic surveying	Complete
b) Preliminary design drawings	Complete
c) ADEQ/3M meeting to discuss progress	Complete
2) Revise SWPPP	Complete
3) Final design of Phase 1 sedimentation and stormwater management controls	Complete
4) Progress Report to ADEQ	Complete
5) Baseline Study	June 1999
6) Construction of Phase 1 stormwater controls	September 1999
7) Develop preliminary design for Phase 2 sedimentation and stormwater controls	October 1999
8) Discuss Phase 2 controls with ADEQ	November 1999
9) Complete final design of Phase 2 stormwater management controls	February 2000
10) Progress Report to ADEQ	March 2000
11) Construction of Phase 2 stormwater management controls	October 2000
12) Monitoring for effectiveness of controls	January 2001
13) Determination of adequacy of controls	February 2001

<b>NPDES Action Item List</b>	<b>Interim Event Target Completion Schedule</b>
14) Meet with ADEQ for adequacy determination	March 2001
15) Progress report to ADEQ, if necessary	March 2001
16) Design and construction of additional controls, if necessary.	July 2001
17) Monitoring for effectiveness of controls	September 2001
18) Determination of adequacy of controls, if necessary	October 2001

### **Milestone Deadlines**

Revise Stormwater Pollution Prevention Plan	Complete
Construction of Phase 1 stormwater controls	October 1, 1999
Construction of Phase 2 stormwater management controls	November 1, 2000
Design and construction of additional controls, if necessary, otherwise no milestone deadline	August 1, 2001
Completion of activities anticipated by the Consent Administrative Order, if necessary, otherwise no milestone deadline	December 31, 2001



Attachment 2. Waters of the State, 3M.

# Attachment B



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

## Modified – Stormwater Inspection Form (2013 – 4<sup>th</sup> Quarter)

### A. GENERAL INFORMATION

1. Facility Name: **3M Industrial Minerals Division – College Station Granule Plant – Little Rock, Arkansas**
2. NPDES Permit Tracking No.: **ARR00B541**
3. Facility Physical Address:
- a. Street: **3110 Walters Road**
- b. City: **Little Rock** c. State: **AR** d. Zip Code: **72216**
4. Lead Inspector's Name: **Steven Srebalus** Title: **EHS Technologist, 3M**
- Additional Inspector's Name(s): **3M**
5. Contact Person: **Steven Srebalus** Title: **EHS Technologist, 3M**
- Phone: **501-490-1509** Ext. **124** E-mail: **sssrebalus@MMM.com**
6. Inspection Date: **12/4/2013**

7. Stormwater Team Meeting Attendees: \_\_\_\_\_ Date: \_\_\_\_\_  
The meeting discussed issues listed below:

### B. GENERAL INSPECTION FINDINGS

1. As part of this comprehensive site inspection, did you inspect all potential pollutant sources, including areas where industrial activity may be exposed to stormwater?  
 YES  NO

If NO, describe why not:

**The inspection included a large portion of the 3M industrial activity sites, but the site is large and remote in some areas. It was not practical to inspect the entire site. The inspection focused on areas that have potential exposure to industrial stormwater and Stormwater Outfalls.**

**NOTE:** Complete Section C of this form for each industrial activity area inspected and included in your SWPPP or as newly identified in B.2 or B.3 below where pollutants may be exposed to stormwater.

2. Did this inspection identify any stormwater or non-stormwater outfalls and/or sources of stormwater or non-stormwater discharges not previously identified in your SWPPP?  
 YES  NO

If YES, for each location, describe the sources of those stormwater and non-stormwater discharges and any associated control measures in place:

3. Did you review stormwater monitoring data as part of this inspection to identify potential pollutant hot spots?  YES  NO  NA, no monitoring performed

If YES, summarize the findings of that review and describe any additional inspection activities resulting from this review:

4. Note offsite operations which have the potential to impact stormwater:

**There were no identified offsite operations that have the potential to impact stormwater.**

5. Have you taken or do you plan to take any corrective actions since your last annual report (or since you received authorization to discharge under this permit if this is your first annual report), including any corrective actions identified as a result of this annual comprehensive site inspection?

YES  NO

If YES, how many conditions requiring review for correction action as specified in Parts Section F 1 & 3 were addressed by these corrective actions? **0 2**

**NOTE:** Complete the attached Corrective Action information for each condition identified, including any conditions identified as a result of this comprehensive stormwater inspection.

**C. INDUSTRIAL ACTIVITY AREA SPECIFIC FINDINGS**

In reviewing each area:

- Industrial materials, residue, or trash that may have or could come into contact with stormwater;
- Leaks or spills from industrial equipment, drums, tanks, and other containers;
- Offsite tracking of industrial or waste materials from areas of no exposure to exposed areas; and
- Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas.

1. Description of corrective action(s) taken or to be taken to eliminate or further investigate the problem (e.g., describe modifications or repairs to control measures, analyses to be conducted, etc.) or if no modifications are needed, basis for that determination:

	Description of Problem	Corrective Action Required? Date Identified:	Corrective Action Performed	Corrective Action Needed and Notes	Responsible Person Estimated Schedule
<b>C1. INDUSTRIAL ACTIVITY AREA :</b>					
1	Skimmer in basin 2 of the ditch by gate 4 is working but barely.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Date ID'ed: 8-22-12	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Start Date: Sept 2012 End Date: 2-4-13	Suggest changing the screen or removing the screen from the skimming piping. Screen was cleaned. Drain ditch clean out to un submerge the #2 basin drain pipe is needed. 3" skimmer was replaced with a 4" skimmer (5/13/2013)	Srebalus 1 <sup>st</sup> qtr. 2013
2	Railroad repair project is generating damaged railroad ties along the Springer Blvd area of the track	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Date ID'ed: 8-22-12	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Start Date: Sept 2012 End Date: 5-24-13	Need to make sure old rail ties are removed after project is complete. Ties were removed.	Plant Sourcing 2 <sup>nd</sup> qtr. 2013

2. Did/will these corrective actions require modification of the SWPPP?  YES  NO

**D. STORMWATER OUTFALL**

1. Qualified facility personnel shall inspect all areas of the facility where industrial materials or activities are exposed to stormwater, all stormwater control measures used to comply with this permit, and stormwater outfalls (if accessible) for the presence of floating materials, visible sheen, discoloration, turbidity, odor, etc. Inspections should be performed not less than four (4) times a year. At least one of the four required inspections must be conducted during a period when a stormwater discharge is occurring. One inspection shall check for the presence of non-stormwater discharges, such as domestic wastewater, non-contact cooling water, or process wastewater (including leachate), to the stormwater drainage system that are not authorized under this general permit. This shall be done preferably during dry weather, when it is easier to find non-stormwater discharges. If a non-stormwater discharge is discovered, the Permittee shall notify ADEQ and eliminate the illicit discharge within 30 days.



	Outfall ID	Stormwater Discharging?	Non-Stormwater Discharge?	Dis-coloration?	Turbidity?	Odor?	Oil Sheen?	Floating Solids?	Comments
1	SW Outfall 101	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	There are natural springs and shallow groundwater that emerge in the main 3M Ditch that discharges to SW Outfall 101.
2	SW Outfall 201	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Increased vegetation growth in the area
3	SW Outfall 301	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Non-Contact Cooling Water is discharging through SW Outfall 301. 3M permit ARG250015.
4	SW Outfall 401	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Rock and Ditch to be monitored for sediment build up
5	SW Outfall 501	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Ditch on the South side of the RR tracks needs to be monitored for build up / clean out of sediment
6	SW Outfall 601	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Increased vegetation growth in the area
7	SW Outfall 701	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Increased vegetation growth in the area
8	SW Outfall 803	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Increased vegetation growth in the area
9	SW Outfall 901	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Increased vegetation growth in the area
10	SW Outfall 1001	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Increased vegetation growth in the area
11	SW Outfall 1101	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Increased vegetation growth in the area
12	SW Outfall 1201	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Increased vegetation growth in the area
13	SW Outfall 1301	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This SW outfall is labeled 1300 on the site map and has increased vegetation growth in the area

### Site-specific BMPs

Structural stormwater management measures/BMPs, sediment and control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are properly maintained and operated correctly.

E.	BMP	BMP Operating Properly?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	Trap 1 Premier – Freeman Stockpile Trap	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3M constructed this new Trap 1 premier trap as part of the Freeman stockpile management plan and is working properly.
2	Trap 1 – Freeman Stockpile Trap	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Solids need to be removed from the fore bay area. AA contacted on 8/30/2013 for removal. <b>Area was cleaned but solids have built up in the area again</b>
3	Trap 2 – Entrance Road Trap	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
4	Trap 3 –	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5	Trap 4 – 28 or finer and gravel pile Trap	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Installed asphalt road cover and concrete curbs to help separate and direct storm water runoff to trap #4
6	Trap 5 –	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
7	Trap 6 –	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
8	Trap 7 –	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Fines needs to be removed from trap opening and rock berm created at opening to coarse filter and direct SW into the opening.
9	Trap 8 –	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
10	Trap 9 –	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
11	Process Water Treatment Hillside Trap	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
12	Trap 10 – D/S Treatment Plant	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vegetation and sediment build up removed 8/12/2013
13	Trap 10 Ditch –	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sediment removed on 9/5/2013
14	Outfall 003 Trap and Oil Booms	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Floating boom basin to be replaced 3 <sup>rd</sup> Qtr. 2013

E.	BMP	BMP Operating Properly?	BMP Maintenance Required?	Corrective Action Needed and Notes
15	Main Ditch Basin 1 – Upstream of Gate 4 Crossing – 2.5 feet deep Basin	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	There is a significant amount of sediment in the basin by the eng trailer and will be cleaned 1 <sup>st</sup> qtr of 2014
16	Main Ditch Basin 2 and Skimmer	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Skimmer replaced, dead tree and vegetation removed as 5-13-2013
17	Main Ditch Basin 3 and Skimmer	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
18	Main Ditch Concrete Swale	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Vegetation along the sides to be removed in 1 <sup>st</sup> qtr of 2014
19	RMC Stockpile Sediment Basin	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
20	RMC Stockpile Sediment Basin Diversion Ditches	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The berm does not extent all the way around the toe of the granule stockpile. A full length diversion berm would direct the stormwater into the RMC Stockpile Sediment Basin. To be completed in 1 <sup>st</sup> qtr of 2014

**Overall Site Conditions:**

Below are some general site issues that should be assessed during inspections.

F.	BMP/activity		Maintenance/ Corrective Action Required?	Corrective Action Needed and Notes
1	Are there areas with erosion and/or sedimentation?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See Site Specific BMP table above
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
3	Are discharge points and receiving waters free of any sediment deposits?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See Site Specific BMP table above.
5	Are the road exits preventing sediment from being tracked into the street?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
6	Are dumpsters covered?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
7	Is trash/litter from work areas collected and placed in dumpsters?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
8	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
9	Are materials that are potential stormwater contaminants stored inside or under cover?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
10	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
11	Land Application area	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	10-20" of soil added and area was then seeded. 9-2013

**G. ANNUAL REPORT CERTIFICATION**

## 1. Compliance Certification

Do you certify that your annual inspection has met the requirements of the permit, and that, based upon the results of this inspection, to the best of your knowledge, you are in compliance with the permit?  YES  NO  NA: (No Certification Required for Quarterly Inspection)

If NO, summarize why you are not in compliance with the permit:

## 2. Annual Report Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Representative Printed Name:

Title:

Plant Manager

Signature:

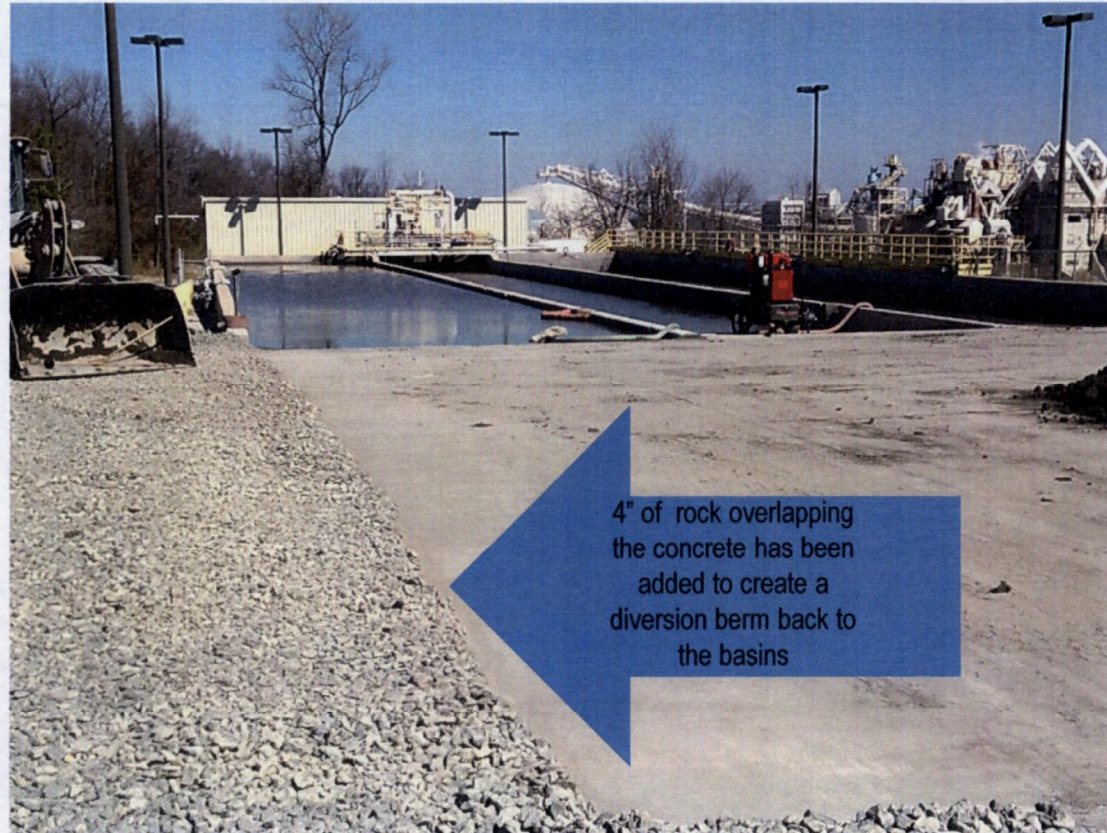
Date Signed:

# Attachment C

## ADEQ Permit ARR00B541 Issue No. 2



## ADEQ Permit 4584-WR-2 Issue No. 1



## ADEQ Permit 4584-WR-2 Issue No. 2



# Attachment D



**Processes and Methods Used for Placement and Storage of Sludge/Solids**

9.1 Frequency of Basin Cleaning	Description
9.1.1	Sludge from any basin should be removed when the solids fill 50% of the volume of a basin per POPCP-LR-C&S-0330. Sludge level should be checked every 2 weeks in each basin.
9.1.1.1	In all three basins, 50% volume can be determined by inserting a 12-foot pole into several locations along the outside wall. At the east end of each basin, the outside concrete wall is 9.5' tall. Thus, if the sludge is approximately 4.5'-5.0' high, the sludge removal process should be started for that particular basin.
9.1.2.2	In the Middle basin, 50% volume can also be determined by pumping the water into the Process Water Facility via P-205 and reading the value for the basin level in the control room.
9.1.2	When sludge needs to be removed from a basin, the basin must be isolated for the process to begin.
9.1.2.1	If the North or South basin needs to be cleaned, then the entering process water from the granule plant must be directed to the basin that is not going to be cleaned. To switch which basin the untreated water is entering, follow operating procedure in LR-POP-ALL-0500 LR Process Water Treatment Plant Operations.
9.1.2.2	If the Middle basin needs to be cleaned, the sludge removal process must be performed while the Process Water Treatment Facility is not operating. Sludge will need to be removed after weekly shut-down and placed onto pad. Depending on the volume of sludge in the basin, there may be more sludge than can fit on the pad in one cycle and several cycles may need to be completed.
9.1.3	Prior to removing sludge from a basin, a barrier needs to be created on the north edge of the concrete pad using the front-end loader and Donna-Fill. This barrier will prevent any process water from escaping the basins by directing the water back into the basins.
9.1.4	Time line for sludge removal:
9.1.4.1	After a barrier has been made, the concrete pad can hold approximately 25-30% of the volume of a basin. Thus, each sludge-removal cycle should remove 25-30% of the solids in a basin and the process should only take two cycles per basin (assuming the basin is only filled 50% with sludge).
9.1.4.2	Sludge should be mixed and dehydrated on the pad for at least 1 week prior to transporting to a landfill. The sludge must be dehydrated to the point that no water will escape onto the roads during transportation via dump truck.
9.1.4.3	Transportation to the landfill should take 2-4 days with access to two dump trucks for transport.
9.1.4.4	For every cycle of sludge removed from a basin (30% of sludge in a particular basin), the process should take two weeks to clear the pad. For a basin 50% full of sludge, the process should take two cycles (equivalent to one month) to complete.
9.2 Dewatering Process	
9.2.1	To minimize the amount of chemical additive used, excess water on the surface of the sludge needs to be transferred from the basin to be cleaned into another basin.
9.2.2	To remove excess water from the North or South basins, two pumping options are available:
9.2.2.1	The PWTP Magnum Diesel Trash Pump (4" pump, located north of the basins) can be used to de-water the basin. The pump can be positioned at the west side of the basin to be cleaned and the Process Water Operator can operate the pump, discharging the excess water to another basin.

9.2.2.2	A not self-priming pump is located on the catwalk on the east end of the middle basin. The pump is plumbed so that each basin has a suction and discharge line. The valves will need to be positioned to pull water from the basin needing to be cleaned and discharge to the empty basin. This pump will need to be primed with a water hose. Depending on the volume of excess water to be removed, this process could take 1-2 days to complete.
9.2.3	To remove excess water from the Middle basin, three pumping options are available:
9.2.3.1	The Process Water Operator can adjust the level set point for the middle basin (in the control room) prior to shut-down to ensure that a minimum amount of excess water remains on the surface of the sludge.
9.2.3.2	A diesel powered 4" pump (e.g. Trap 6 pump) can be used to de-water the basin. The pump can be positioned at the west side of the basin to be cleaned and the Process Water Operator can operate the pump, discharging the excess water to another basin.
9.2.3.3	A pump is located on the catwalk on the east end of the middle basin. The pump is plumbed so that each basin has a suction and discharge line. The valves will need to be positioned to pull water from the basin needing to be cleaned and discharge to the empty basin. This pump will need to be primed with a water hose. Depending on the volume of excess water to be removed, this process could take 1-2 days to complete.
<b>9.3 Solidification Process</b>	
9.3.1	Before any solidification process can begin, the chemical additive must be delivered onto the pad.
9.3.1.1	Delivery onto the northwest corner of the pad is recommended (see photograph below). This additive must not spill over the concrete wall.
9.3.1.2	Delivery via a dump truck is recommended over a pneumatic hopper truck, although both types are adequate.
9.3.1.3	Process Water Operator or C&S Process Engineer must oversee the delivery of the chemical additive. Instruct the delivery driver to unload additive as slowly as possible to minimize dusting.
9.3.1.4	To minimize dusting, immediately cover the additive with a plastic sheeting material (e.g. Visqueen). Follow all PPE requirements.
9.3.2	Immediately after delivery of chemical additive but prior to removing sludge from a basin, a barrier needs to be created on the concrete pad using the front-end loader and 28 finer (-28 mesh) material from discharge of 44-Conveyor. This barrier will prevent any process water or contaminated rain water from escaping the basins by directing the water back into the basins. The barrier must enclose any sludge that will be removed and any chemical additive that has been delivered on the pad.
	The details of the barrier are as follows:
	1) The barrier must extend along the north edge of the concrete pad but should be at least 2' south of the north edge of the pad. The purpose for this gap is to ensure that even if the barrier breaks, the sludge will still be contained within the basins.
	2) The barrier must extend from the northwest corner of the cement wall to approximately 15' west of the west side of the basin walls.
	3) The barrier must then extend south to the south concrete wall.
	4) The barrier must not spill over the concrete walls of the pad.
	5) This barrier will allow for mobile equipment to access the basins but will also contain liquid sludge for the de-watering process.
9.3.3	A cycle of sludge should be removed from the basin to be cleaned and mixed with the chemical additive.
9.3.3.1	Operator will remove sludge from basin via two methods, as stated below. The sludge will then be spread out on the pad.
9.3.3.1.1	The PWTP Magnum Diesel Trash Pump should be used to transfer the liquid sludge (settles on top of the solidified sludge) from a basin to the center of the 28-Finer barrier.
9.3.3.1.2	A front-end loader (the Komatsu Loader or Kawasaki Loader) should be used to transfer the solidified sludge from a basin to the center of the 28-Finer barrier. See section 14.2 to view a video of sludge being removed from the south basin via a front-end loader.
9.3.3.2	Additive will be mixed with sludge on the concrete pad only (DO NOT mix in the basin). Minimal additive should be used during the mixing process. Any remaining additive should be covered with a plastic sheeting material for the next cycle.
	<b>WARNING: DO NOT</b> pile the solids in such a way that solids can escape over the edge of the concrete walls of the pad. Similarly, <b>DO NOT</b> pile the solids in such a way that storm water can contact the solids on the pad and then flow over the concrete walls of the pad.

	NOTE: For estimated usage of each chemical additive, refer to POPCP-LR-C&S-0330 Process Water Treatment Plant Basins - Solids Removal Process.
9.3.3.3	If possible, mixing should start on the same day as additive delivery in order to minimize dusting.
9.3.3.4	When dehydration of the sludge is complete, the material to be transported to the landfill must be stackable and not flowing to qualify for landfill disposal.
9.3.4	A trucking company must be scheduled to transport the dehydrated sludge material to the landfill. Two continuous trucks in operation are recommended.
9.3.4.1	Any truck leaving the 3M site with dehydrated sludge from Process Water Treatment Plant must have a manifest stating type of material and the final destination.
9.3.4.2	Blank manifest forms can be received from the C&S Process Engineer. The Process Engineer obtains blank manifests from Allied Waste Services.

# ADEQ

ARKANSAS  
Department of Environmental Quality

March 31, 2014

Steven Srebalus  
3M Company  
PO Box 165680  
Little Rock, AR 72216

RE: Inspection Report Response  
AFIN: 60-00003; Permit Number: 4584-WR-2

Dear Mr. Srebalus:

The ADEQ Water Division Inspection Branch is in receipt of the response dated March 13, 2014 regarding the inspection of the above referenced facility on February 13, 2014. The determination has been made that the placement of the solids/sludges on the dewatering pad requires a modification of the facility's Waste Management Plan (WMP). In response to this letter, you are required to contact the ADEQ Water Division Permits Branch and obtain the necessary authorization for this activity. You may contact Colby Ungerank, Engineer, at 501-682-0047 with any questions regarding the approval process.

The above items require your immediate attention. Please submit a written response to these findings to the Water Division Inspection Branch of this Department. This response should be mailed to the address at the bottom of the letter or e-mailed to [Water-Inspection-report@adeq.state.ar.us](mailto:Water-Inspection-report@adeq.state.ar.us). This response should contain documentation describing the course of action taken to correct each item noted. **This corrective action should be completed as soon as possible, and the written response with all necessary documentation is due by April 14, 2014.** If I can be of any assistance, please contact me 501-682-0658 or [parkerr@adeq.state.ar.us](mailto:parkerr@adeq.state.ar.us).

Sincerely,



Risa Parker  
District 9 Field Inspector  
Water Division

CC: Colby Ungerank, Water Division Permits Branch

**From:** [Parker, Risa](#)  
**To:** [McConnell, Melissa](#)  
**Subject:** FW: 3M Land App. Response Letter  
**Date:** Friday, April 11, 2014 1:33:47 PM  
**Attachments:** [2014 ADEQ Reponse Letter-Land App.041114.pdf](#)

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Please to add to Water ID 13307.

**From:** sssrebalus@mmm.com [mailto:sssrebalus@mmm.com]  
**Sent:** Friday, April 11, 2014 1:27 PM  
**To:** Parker, Risa  
**Cc:** Nathan Siria; whneumann1@mmm.com; john.lowrey@mmm.com; krowe@mmm.com; rrbryan@mmm.com  
**Subject:** 3M Land App. Response Letter

Steven Srebalus  
EHS Technologist  
3M Little Rock, AR  
800-245-8018  
Triminet 8-564-1124  
Cell 501-944-9835

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**3M Industrial Mineral Products** 3M  
P O Box 165860  
Little Rock, AR 72216 – 5860  
Phone (501) 490-1509

April 14, 2014



Arkansas Department of Environmental Quality  
Water Division, Inspection Branch  
5301 Northshore Drive  
North Little Rock, Arkansas 72118-5317  
[Water-Inspection-Report@ADEQ.State.AR.US](mailto:Water-Inspection-Report@ADEQ.State.AR.US)

RE: 3M Company – College Station Granule Plant  
3M Response to ADEQ March 31, 2014 Letter Request  
AFIN 60-00003; Permit Number: 4584-WR-2

Dear Risa Parker:

In response to the Arkansas Department of Environmental Quality (ADEQ) Inspection Report Response letter dated March 31, 2014, 3M has completed and prepared the following responses to ADEQ.

**The referenced ADEQ letter response stated:** *“The determination has been made that the placement of the solids/sludges on the dewatering pad requires a modification of the facility’s Waste Management Plan (WMP). In response to this letter, you are required to contact the ADEQ Water Division Permits Branch and obtain the necessary authorization for this activity. “*

**3M Response and Meeting Results:** 3M contacted Colby Ungerank with ADEQ and set up a face-to-face meeting to discuss the solids management practices as requested by the referenced letter. 3M, FTN, Colby Ungerank and John Bailey met on April 9, 2014, at 9:00 AM. The meeting concluded with the following discussions and agreements:

1. **Waste Management Plan:**

- 3M agrees to modify the site Waste Management Plan (WMP) for Permit No. 4584-WR-2 to include the solids management practices for the process water treatment basin.
- 3M agrees to submit the revised WMP and No Discharge Permit application packet to modify the referenced permit.
- 3M will submit the WMP and No Discharge Permit application to ADEQ by May 31, 2014.

2. **Enforcement Division Contact:**

- ADEQ requested that 3M contact the Enforcement Division and see if this proposed schedule and actions meet ADEQ’s compliance intent. FTN Associates contacted the

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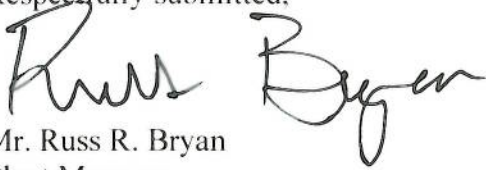
Enforcement Division (Risa Parker) and she agreed that the proposed May 31, 2014, WMP update submittal schedule seemed reasonable.

**3. Solid Waste Division Contact:**

- ADEQ requested that 3M contact the ADEQ Solid Waste Division and verify that the solids dewatering operations do not require a permit from the Solid Waste Division. FTN Associates contacted the ADEQ Solid Waste Technical Branch Engineer Supervisor (Bryan Leamons) to explain the basin solids management operations. Mr. Leamons agreed that based on 3M's existing dewatering basin solids management scenario of transporting and disposing of this material in a permitted landfill, that there is no need for a solid waste permit for this process or waste.

If you have any questions or need further information please call me at (501) 490 1509 Ext. 157 or Steven Srebalus at (501) 490-1509 Ext. 124.

Respectfully submitted,



Mr. Russ R. Bryan  
Plant Manager  
3M Little Rock