

ADEQ

ARKANSAS
Department of Environmental Quality

CERTIFIED MAIL: 7002 0860 0007 6824 6130
RETURN RECEIPT REQUESTED

January 4, 2005

Allen Johnson
3M Industrial Mineral Products Division
P.O. Box 165860
Little Rock, AR 72216-5860

RE: AFIN No. 60-00003, Permit No. 4584-WR-1

Dear Mr. Johnson:

Enclosed is your permit for the waste disposal system as set forth in your application received June 2, 2004.

After considering the facts and requirements of the Arkansas Water and Air Pollution Control Act (A.C.A. Sec. 8-4-101 et seq) and subsequent regulations, the Department has determined that your permit for the construction, operation, and maintenance of a water pollution control system be issued and effective on the date specified in the permit. This decision is final unless a Commission review has been properly requested under Section 4, Part III, of Regulation No. 8, Arkansas Department of Environmental Quality Administrative Procedures, as amended, within 30 days after service of this decision. All persons who have legal standing to do so may request an adjudicatory hearing and Commission review on whether the Director's decision should be reversed or modified. Such a request shall be in the form and manner required by Regulation No. 8, as amended.

In addition to the permit conditions contained herein, the permittee must comply with all other applicable State and Federal Regulations, including, but not limited to, Acts 1059, 1060, and 1061 of 2003, and the regulations promulgated thereunder by the Arkansas Soil & Water Conservation Commission.

If you have any questions, please contact the State Permits Branch at (501) 682-0648.

Sincerely,



Martin Maner, P.E.
Chief, Water Division

cc: Rex Robbins, P.E., Consultant, FTN Associates, Ltd.
Eric Fleming, District Field Inspector, Pulaski County
Arkansas Department of Health



PERMIT



ISSUED BY
 STATE OF ARKANSAS
 DEPARTMENT OF ENVIRONMENTAL QUALITY
 8001 NATIONAL DRIVE, P.O. BOX 8913
 LITTLE ROCK, ARKANSAS 72219-8913

AFIN No. 60-00003 Effective Date January 3, 2005
 Permit No. 4584-WR-1 Expiration Date September 29, 2009

TO: 3M Industrial Mineral Products Division
 P.O. Box 165860
 Little Rock, AR 72216-5860

This permit is your authority to operate and maintain the waste disposal system in Section 24, Township 1 North, Range 12 West, in Pulaski County as set forth in your application or transfer form received June 2, 2004. This permit is issued subject to provisions of the Arkansas Water and Air Pollution Control Act (A.C.A. Sec. 8-4-101 et seq.) and the following thirty-two (32) conditions:

1. This permit is for the land application of industrial wastewater and truck wash sediment. Waste shall not be discharged from this operation to the waters of the State or onto the land in any manner that may result in runoff to the waters of the State.
2. The waste disposal system shall be operated and maintained in accordance with the Waste Management Plan (WMP) as approved by the Department of Environmental Quality.
3. The disposal system shall be serviced by qualified personnel and maintained in good operating condition at all times.
4. Bypassing of the disposal system is prohibited and may result in the revocation of this permit and/or other appropriate enforcement action by the Department.
5. There shall be no increase in the volume or strength of the waste being treated by the disposal system except within design limits covered in the WMP approved by the Department.
6. This permit may be revoked or modified at any time, if in the opinion of the Department, it is necessary to prevent or abate pollution of any waters of the State.
7. Nothing herein contained shall be construed as releasing the permittee from any liability for damage to persons or property by reason of the installation, maintenance or operation of the disposal system.
8. Any violations to this permit must be reported to the Department immediately.
9. This permit is issued in reliance upon the statements and representations made in the application and the WMP. The Department has no responsibility for the adequacy or proper functioning of the disposal system.

PLEASE NOTE ADDITIONAL CONDITIONS ON THE ATTACHED SHEETS.

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY

By: *Walter M. Mamer, P.E.* 1-3-05
 Chief, Water Division Date

**ADDITIONAL PERMIT CONDITIONS FOR THE LAND APPLICATION OF
INDUSTRIAL WASTEWATER AND TRUCK WASH SOLIDS
3M INDUSTRIAL MINERAL PRODUCTS DIVISION
PERMIT NO. 4584-WR-1; AFIN NO. 60-00003**

GENERAL REQUIREMENTS:

10. **THE DESIGN AND OPERATION OF THE PROPOSED WASTEWATER LAND APPLICATION SYSTEM SHALL BE IN ACCORDANCE WITH THE U.S. E.P.A. RECOMMENDED PRACTICES AS WELL AS THE ADEQ GUIDELINES.**
11. Only wastes that are not classified as a hazardous waste under state or federal regulations may be land applied.
12. Plant Available Nitrogen (PAN) shall not be applied at a rate exceeding the annual nitrogen uptake of the crop. The nitrogen application rate (PAN/acre-year) shall not be allowed to exceed the site-specific rate approved by the Department.
13. When the land application of wastes is governed by the hydraulic loading rate instead of the pollutant loading rate, the hydraulic rate shall not be allowed to exceed the site specific rate approved by the Department.
14. The permittee shall be responsible for assuring that the landowner of any land application site not owned by the permittee, will also abide by the conditions of this permit.
15. Wastes shall be spread evenly over the application area and in no way shall wastewater be allowed to enter the waters of the State.
16. Wastes shall not be applied to soils that are saturated, frozen or covered with snow, and during rain or when precipitation is imminent, or at any time that could result in runoff to a watercourse. Wastes shall not be applied to slopes with a gradient greater than 15%.
17. The permittee shall not cause any underground drinking water source to exceed the limitations stated in 40 CFR 257 Appendix I.
18. The permittee shall not cause or contribute to the taking of life or the destruction or adverse modification of the critical habitat of any known endangered or threatened species of plant, fish or wildlife.
19. The permittee shall take all necessary measures to reduce obnoxious and offensive odors. The equipment utilized in the land-application of wastes shall be maintained and operated to prevent spills, leaks or un-permitted discharges.
20. Wastewater shall not be spread within 25 feet of rock out crops, 50 feet of property lines or land tracts not associated with the permit, 100 feet from streams, lakes, ponds, wetlands, and other waters of the State, 200 feet of drinking wells, and 300 feet of occupied buildings or extraordinary resource water bodies.
21. The permittee shall give 120 days prior notice to the Director of any change planned in the wastewater disposal practice.

22. All land application sites must have a waste management plan approved by the Department prior to land application of wastes. Additional land applications sites must be approved by the Department prior to use. The additions of land-application sites normally require a permit modification.
23. Disposal of waste in a flood plain shall not restrict the flow of the base flood, reduce the temporary storage capacity of the flood plain, or result in a washout of solid waste, so as to pose a hazard to human life, wildlife or land and water uses.

TRUCK WASH SEDIMENT REQUIREMENTS:

24. Waste must be evenly distributed over the land-application areas. The land-application can only be performed once per year at the approved rate on a given area. If the permittee desires to reapply waste over the same area the following year, the permittee must sample and analyze the soil for Total Petroleum Hydrocarbons (TPH). Only when the TPH concentrations in the soil are 10 mg/kg or less can the permittee land-apply again.
25. The concentration of total petroleum hydrocarbons (TPH) in the truck wash solids must be determined prior to land application. If the TPH concentration in the solids exceeds 2,000 mg/kg, Department approved methods other than land application must be used for disposal.
26. The permittee must take a representative sample of the stored solids for every fifteen (15) cubic yards collected. In case that the total waste amount exceeds the fifteen (15) cubic yards limit, additional samples must be collected.
27. The truck wash solids must be stored in a designated-covered area while the TPH concentrations are being analyzed by an approved laboratory. The waste material may be stockpiled under a suitable roof or covered with a waterproof material properly secured to avert contamination of runoff water.
28. Carwash solids with TPH concentrations equal or less than 100 mg/kg may be land-applied or utilized as filling material. If the TPH concentration in the waste is more than 100 mg/kg but less than 2,000 mg/kg, the following procedures may be used for reducing the TPH concentrations before land-application:
 - a. The solids must be thoroughly mixed with the land-application site TPH-free soils at a minimum depth of six (6) inches that will result in a TPH concentration of 100 mg/kg or less in the mixed soil, or
 - b. Import the necessary amounts of TPH-free off-site soils to reduce the TPH concentration to 100 mg/kg or less.

Note: Sample calculations for the two cases (a. and b.) mentioned above may be found in the Department's "Guidelines for The Land Application of Carwash Solids."

MONITORING AND REPORTING REQUIREMENTS:

29. The permittee shall be responsible for the monitoring, supervision, operation, quality control, recording, and reporting of the facility's activities. All analytical results must be expressed in mg/l unless otherwise indicated. These activities shall include the following:

a. Irrigation Water

- (1) Daily Monitoring:
 - Flow (mgd)
 - Depth Irrigated (inches)
 - Area Irrigated (acres)
- (2) Annual Monitoring:
 - Total Kjeldahl Nitrogen
 - Ammonia Nitrogen
 - Nitrate + Nitrite Nitrogen
 - BOD5
 - Arsenic
 - Cadmium
 - Copper
 - Lead
 - Mercury
 - Selenium
 - Zinc
 - Conductivity (mhos)
 - pH (SU)

b. Truck Wash Solids

- (1) TPH concentration in the stock piled solids
- (2) Location and total area in square feet utilized in the land-application operation
- (3) For solids with TPH concentrations greater than 100 mg/kg: Tract disturbed to accommodate the land-application operation, or amount of imported soils depending on the method utilized to reduce the TPH concentrations. Include calculations.
- (4) Current use and condition of the site where the solids are land-applied. Include cover crop.
- (5) Calculated TPH concentration of the solids land-applied.
- (6) Annual Soil TPH concentration if the same site is utilized again after one year of a land-application event.

c. Land Application Site Soils

- (1) Annual Monitoring (in lbs/acre except as indicated)
 - Nitrate Nitrogen
 - Phosphorus
 - Potassium
 - Arsenic
 - Cadmium
 - Copper

- Lead
- Magnesium
- Mercury
- Nickel
- Zinc
- Conductivity (mhos)
- pH (SU)

Each land application site shall be soil tested in the Spring prior to application. Laboratory results shall be received by ADEQ not later than May 1 of each year.

d. Reporting

- (1) Annual reports shall be sent to the Department and to the owner of the land receiving solids prior to May 1, which must include the following:

The wastewater and soil analyses conducted under this condition (including a statement that the analyses were performed in accordance with EPA Document SW-846, "Test Methods for Evaluation of Solid Waste," or other procedures approved by the Director), application dates and locations, volumes of wastewater applied (in gallons/acre-year), methods of disposal, identity of the hauler, type of crop grown, amounts of nitrogen applied, total pollutants added that year (lbs/acre), total pollutants applied to date, and copies of the soil analyses for each site. The permittee shall also maintain copies of the above records for Department personnel review at the generating facilities.

30. Solids, solid slurries, or other pollutants removed in the course of the treatment shall be disposed in a manner previously approved by the Department.
31. If the permittee wishes to continue the activity regulated by this permit after its expiration date, the permittee must apply and obtain a new permit. The complete application must be submitted to the Department at least 120 days before the expiration date of the permit. The Director may grant permission to submit an application less than 120 days in advance but not later than the permit expiration date.
32. The permit conditions will continue in effect past its expiration date pending issuance of a new permit, provided that:
- a. The permittee has timely submitted a complete application as described in Condition 31, and
 - b. The Director, through no fault of the permittee, does not issue a new permit prior to the expiration date of the previous permit.

STATEMENT OF BASIS

THIS IS A STATE WATER PERMIT FOR A NO-DISCHARGE OPERATION UNDER PERMIT NUMBER 4584-WR-1 AND AFIN NUMBER 60-00003. WASTE SHALL NOT BE DISCHARGED FROM THIS FACILITY TO THE WATERS OF THE STATE OR ONTO LAND IN ANY MANNER THAT MAY RESULT IN RUNOFF TO THE WATERS OF THE STATE.

ISSUING OFFICE AND DATE:

Arkansas Department of Environmental Quality
Water Division, State Permit Branch
8001 National Drive
Post Office Box 8913
Little Rock, Arkansas 72219

August 23, 2004

ADEQ EVALUATING ENGINEER: Keith E. Karmel

APPLICANT:

3M Industrial Mineral Products Division
P. O. Box 165860
Little Rock, AR 72216-5860
501-490-1509

1. FACILITY INFORMATION:

Facility Type and Size: Roofing granule plant

SIC Code: 3295

NAICS Code: 325188

Stream Segment: 3C Nearest Stream: Fourche Creek

Nearest Community: Little Rock County: Pulaski

Section: 24 Township: 1 North Range: 12 West

Latitude: 34° 42' 0" Longitude: 92° 14' 30"

Road Location Description: East of Little Rock city limits near the College Station community, North and East of Hwy. 365

Additional Site Information: Renewal; no changes made to system; industrial wastewater and truck wash sediment will be land applied to the following site:

<u>Site</u>	<u>Owner</u>	<u>Section</u>	<u>Township</u>	<u>Range</u>	<u>Available acres</u>
1	3M Industrial Mineral	24	1 North	12 West	43

2. GENERAL REQUIREMENTS

The storage volume required for the waste generated at the facility is based on the size of the facility and the amount of waste produced. Solid material accumulated in all waste storage basins shall be removed as necessary to maintain the basin's design volume. The storage facility's liners and structures shall be maintained to prevent leaking or seepage. Any leaks or seeps shall be reported to the Department and appropriately corrected. Any discharge from the waste storage system such as an overflow, a broken pipe, etc., shall be immediately reported to the Department.

3. BASIS FOR PERMIT CONDITIONS

The Arkansas Department of Environmental Quality has made a tentative determination to issue a permit for the no-discharge facility as described in the application and waste management plan. Permit requirements and conditions are based on regulations pursuant to the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended, Ark. Code Ann. 8-4-101 et. seq.).

4. SOURCES FOR DOCUMENT DEVELOPMENT

- A. Regulation No. 2, Water Quality Standards for Surface Waters of the State of Arkansas, as amended.
- B. Regulation No. 8, Administrative Procedures, as amended.
- C. Regulation No. 9, Fee System for Environmental Permits, as amended.
- D. ACT 165 of 1993, Public Notice Requirements
- E. ACT 472 of 1949, as amended, Arkansas Water and Air Pollution Control Act

5. PUBLIC NOTICE

A Draft Permit and draft public notice will be sent to the applicant and District Engineer of the Natural Resource Conservation Service or consulting engineer prior to publication of notice.

The public notice describes the procedures for the formulation of final determinations and shall provide for a public comment period of 30 days. During this period, any interested persons may submit written comments on the Draft Permit and may request a public hearing to clarify issues involved in the permit decision. A request for a public hearing shall be in writing and shall state the nature of the issue(s) proposed to be raised in the hearing.

For additional information, contact:

Doug Szenher, Information Officer
Arkansas Department of Environmental Quality
8001 National Drive
P.O. Box 8913
Little Rock, Arkansas 72219-8913