STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 052009-002 Project Number: 2009-01-043

Parent Company: MFA Incorporated

Parent Company Address: 201 Ray Young Drive, Columbia, MO 65201

Installation Name: MFA Terminal Warehouse - Aurora

Installation Address: 565 W. High, Aurora, MO 65605

Location Information: Lawrence County, S1, T26N, R26W

Application for Authority to Construct was made for:
The transformation of the current retail bulk plant to a terminal storage facility for distribution of product to surrounding facilities. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, Construction Permits Required.

☐ Standard Conditions (on reverse) are applicable to this permit.

☑ Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

MAY 5 2009

EFFECTIVE DATE

DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES
STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devises shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Departments’ Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant sources(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources’ personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. “Conditions required by permitting authority.”

MFA Terminal Warehouse - Aurora
Lawrence County, S1, T26N, R26W

1. Emission Limitation
   A. MFA Terminal Warehouse - Aurora shall emit less than 15.0 tons of particulate matter less than ten (10) microns in diameter (PM$_{10}$) in any consecutive 12 month period from:
      - EP-1a  (Fertilizer Receiving)
      - EP-2a  (Storage Bays and Enmasse Conveyor)
      - EP-3a  (Loadout)
      - EP-3b  (Loadout)
      - EP-4  (Haul Road)
      - EP-5a  (Enmasse Conveyor)
      - EP-5b  (Weigh Hopper)
   
   B. MFA Terminal Warehouse - Aurora shall maintain an accurate record of PM$_{10}$ emitted into the atmosphere from the entire installation. Attachment A or an equivalent form shall be used for this purpose. MFA Terminal Warehouse - Aurora shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources’ personnel upon request.
   
   C. MFA Terminal Warehouse - Aurora shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 1 A indicate that the source exceeds the limitation of Special Condition Number 1 B.

2. MFA Retail Terminal Warehouse – Aurora shall enclose the following emission units prior to the operation each unit:
   A. EP–2a Storage Bays and Bucket Loaders
   B. EP–5a Enmasse Conveyor
   C. EP–5b Weigh Hopper and Belt Conveyor
REVIEW SUMMARY

- MFA Terminal Warehouse - Aurora has applied for authority to transform the current retail bulk plant to a terminal storage facility by upgrading their current rail receiving system and adding a new loadout point by adding an enmasse conveyor systems.

- Hazardous Air Pollutant (HAP) emissions are not expected from the proposed equipment.

- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.

- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.

- No air pollution control equipment is being used in association with the new equipment.

- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Potential emissions of PM$_{10}$ are limited to less than de minimis levels.

- This installation is located in Lawrence County, an attainment area for all criteria air pollutants.

- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].
• Ambient air quality modeling was not performed since conditioned potential emissions of the application are limited to less than de minimis levels.
• Emission’s testing is not required for the equipment.
• No Operating Permit is required for this installation.
• Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

MFA Incorporated's current Bulk Plant in Aurora, Missouri, mixes and distributes bulk fertilizer. This facility was grandfathered therefore it did not fall under 10 CSR 10-6.060 Section (5) Construction Permits Required. The facility currently holds a Basic Operating Permit. A Basic Operating Permit will no longer be required since this permit limits the emissions from this installation below de minimis levels. The fertilizer blended is composed of ammonium nitrate, potassium, diammonium phosphate, urea, and sul-po-mag. Fertilizer is received and conveyed to a bucket elevator, which discharges to an overhead screw conveyor that in turn discharges to individual storage bays. From the storage piles, fertilizer is transferred to a weigh hopper and mixer via bucket loader. Once the fertilizer is mixed, it is transferred to trucks via conveyor.

No construction permits have been issued to MFA Terminal Warehouse - Aurora from the Air Pollution Control Program.

PROJECT DESCRIPTION

MFA Incorporated wants to convert the current retail fertilizer plant to a dry fertilizer terminal to support surrounding plants. The following changes will be made to the facility. The north rail receiving area will be removed and the south rail receiving will be upgraded with an enmasse conveyor system that is rated at 200 tons per hour. There will be a new loadout point installed on the east side of the facility with a new enmasse conveyor that is rated at 120 tons per hour. Currently there is a loadout point on the north side of the facility that will remain operational but will only be utilized in extreme conditions or during mechanical problems that prevent the operation of the new loadout point. The applicant proposed a de minimis limit for PM$_{10}$ emissions, which will apply to the entire installation.

EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the Environmental Protection Agency (EPA) document AP-42, Compilation of Air Pollutant Emission Factors, Fifth Edition, section 8.3 Ammonium Nitrate, July 1993. Because no emission factors exist for the fertilizer industry, emission calculations were based on the emission factor, 0.02 lb of PM$_{10}$/ ton of fertilizer, for ammonium nitrate handling. A 3.7% control factor has been applied to all enclosed processes. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year.) The following table provides an emissions summary for this project.

- 5 -
Table 1: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Regulatory De Minimis Levels</th>
<th>Existing Potential Emissions</th>
<th>Existing Actual Emissions (EIQ)</th>
<th>Potential Emissions of the Application</th>
<th>**New Installation Conditioned Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>47.11</td>
<td>0.178</td>
<td>68.13</td>
<td>&lt;15.0</td>
</tr>
<tr>
<td>SOx</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NOx</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

N/A = Not Applicable **Conditioned Potential based on voluntary de minimis limit.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Conditioned potential emissions of PM$_{10}$ are below de minimis levels.

APPLICABLE REQUIREMENTS

MFA Terminal Warehouse - Aurora shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved.

GENERAL REQUIREMENTS

- Submission of Emission Data, Emission Fees and Process Information, 10 CSR 10-6.110
  The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required June 1 for the previous year's emissions.

- Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin, 10 CSR 10-6.170

- Restriction of Emission of Visible Air Contaminants, 10 CSR 10-6.220

- Restriction of Emission of Odors, 10 CSR 10-3.090

STAFF RECOMMENDATION
On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Gerad Fox  
Environmental Engineer  

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated January 27, 2009, received January 29, 2009, designating MFA Inc. as the owner and operator of the installation.


- Southwest Regional Office Regional Office Site Survey, not received.
### Attachment A: Monthly PM$_{10}$ Emissions Tracking Record

MFA Terminal Warehouse - Aurora
Lawrence County, S1, T26N, R26W
Project Number: 2009-01-043
Installation ID Number: 109-0053
Permit Number: _______

This sheet covers the period from ___ to ___.

(month, year)   (month, year)

<table>
<thead>
<tr>
<th>Month</th>
<th>Receiving</th>
<th>Loadout</th>
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<tbody>
<tr>
<td></td>
<td>Monthly Production (tons)</td>
<td>Composite PM$_{10}$ Emission Factor (lbs/ton)</td>
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<tr>
<td>-------</td>
<td>------------</td>
<td>---------</td>
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<tr>
<td>Example</td>
<td>44,000</td>
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</table>

**Note 1:** The Monthly Emissions (lbs) are calculated by multiplying the Monthly Production (tons) by the Composite Emission Factor (lbs/ton).

**Note 2:** The Monthly Emissions (tons) are calculated by dividing the Monthly Emissions (lbs) by 2,000.

**Note 3:** The Total Monthly Emissions is calculated by adding the Month's Emissions (tons) from the Receiving category to the Monthly Emissions (tons) from the Loadout category.

**Note 4:** The Total 12-Month Emissions (tons/year) are a rolling total calculated by adding the Month's Emissions (tons) to the Monthly Emissions (tons) of the previous eleven (11)
months. A total of less than 15 tons in any consecutive 12-month period indicates compliance.
Mr. Alan Mahoney  
Safety, Environmental & Regulatory Manager  
MFA Terminal Warehouse - Aurora  
565 W. High  
Aurora, MO 65605  

RE: New Source Review Permit - Project Number: 2009-01-043  

Dear Mr. Mahoney:  

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files.  

Operation in accordance with these conditions, your new source review permit application and with your amended operating permit is necessary for continued compliance.  

The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.  

If you have any questions regarding this permit, please do not hesitate to contact Gerad Fox at the Departments’ Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.  

Sincerely,  

AIR POLLUTION CONTROL PROGRAM  

Kendall B. Hale  
New Source Review Unit Chief  

KBH:gfk  

Enclosures  

c: Southwest RegionalOffice  
PAMS File: 2009-01-043  

Permit Number: