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: 102007-006 Project Number: 2007-07-030

Parent Company: MFA Incorporated

Parent Company Address: 201 Ray Young Drive, Columbia, MO 65201-3599

Installation Name: MFA Agri Service - Mexico

Installation Address: 2816 E. Liberty, Mexico, MO 65265

Location Information: Audrain County, S31, T51N, R8W

Application for Authority to Construct was made for:
The modification of an existing installation to replace the fertilizer blending system with two new verticle blenders. 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.

OCT 10 2007

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 department’s 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 with 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 Agri Service - Mexico
Audrain County, S31, T51N, R8W

1. Emission Limitation

   A. MFA Agri Service - Mexico shall emit less than 15 tons of particulate matter less than ten (10) microns in diameter (PM$_{10}$) in any consecutive 12 month period from the entire installation.

   B. MFA Agri Service - Mexico 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 Agri Service - Mexico 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 Agri Service - Mexico shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records from this Special Condition indicate that the source exceeds the limitation of 15 tons of PM$_{10}$ per year.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW
Project Number: 2007-07-030
Installation ID Number: 007-0036
Permit Number:

MFA Agri Service - Mexico
2816 E. Liberty, Mexico, MO 65265
Complete: July 2 2007
Reviewed: August 9, 2007

Parent Company:
MFA Incorporated
201 Ray Young Drive, Cilumbia, MO 65201-3599

Audrain County, S31, T51N, R8W

REVIEW SUMMARY

• MFA Agri Service - Mexico has applied for authority to modify the existing installation by replacing the fertilizer blending system with two new verticle blenders.

• 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.

• 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 pollutant are below de minimis levels.

• This installation is located in Audrain 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 the conditioned potential emissions of the application are below de minimis levels.

• Emissions 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 Agri Service – Mexico is an existing installation located in Audrain County, Missouri (S31, T51N, R8W) that stores and blends fertilizers, seeds and grains. The following permits have been issued to the installation.

Table 1: List of Issued Permits

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Completion Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1093-020</td>
<td>10/13/1993</td>
<td>Modification of the installation to add a new suspension fertilizer blending and storage facility.</td>
</tr>
<tr>
<td>2006-04-080</td>
<td>11/21/2006</td>
<td>Basic Operating Permit Renewal</td>
</tr>
<tr>
<td>2006-10-084</td>
<td>12/28/2006</td>
<td>Addition of seed treatment and storage</td>
</tr>
</tbody>
</table>

PROJECT DESCRIPTION

The purpose of this project is to replace the two current fertilizer blenders, each rated at 45 tons per hour, with two new vertical blenders, each rated at 60 tons per hour. The vehicular miles traveled (VMT) of the haul roads will also increase with this project from 1.2 VMT to 2.4 VMT.

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 9.9.1 *Grain Elevator and 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.

Table 1: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>156.71</td>
<td>0.99</td>
<td>33.65</td>
<td>&lt;15.00</td>
</tr>
<tr>
<td>SOx</td>
<td>40.0</td>
<td>0.04</td>
<td>N/A</td>
<td>0.0</td>
<td>N/A</td>
</tr>
<tr>
<td>NOx</td>
<td>40.0</td>
<td>7.49</td>
<td>N/A</td>
<td>0.0</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>0.10</td>
<td>N/A</td>
<td>0.0</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>1.26</td>
<td>N/A</td>
<td>0.0</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>0.0</td>
<td>N/A</td>
</tr>
</tbody>
</table>

N/A = Not Applicable

** Existing Potential Emissions of 94.51 tpy PM$_{10}$ estimated during the review of this project since they were never computed for a construction permit, as well as 62.20 tpy PM$_{10}$ from an equipment addition on project 2006-10-084, permit 122006-019. Existing Potential Emissions for non-PM$_{10}$ emissions taken from operating permit, project number 2006-04-080.

*** Potential Emissions of the Application taken from equipment addition and increase in haul road length.
PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. The potential emission of PM$_{10}$ is below the de minimis level.

APPLICABLE REQUIREMENTS

MFA Agri Service - Mexico 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. For a complete list of applicable requirements for your installation, please consult your operating permit.

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 April 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.

Jeannie Kozak
Environmental Engineer

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated June 28, 2007, received July 2, 2007, designating MFA Incorporated as the owner and operator of the installation.


- Northeast Regional Office Regional Office Site Survey July 18, 2007.
# Attachment A – PM$_{10}$ Compliance Worksheet

## MFA Agri Service - Mexico

Audrain County, S31, T51N, R8W  
**Project Number:** 2007-07-030  
**Installation ID Number:** 007-0036

This sheet covers the period from **(month, year)** to **(month, year)**.

<table>
<thead>
<tr>
<th>Month, Year</th>
<th>Grain</th>
<th>Feed</th>
<th>Fertilizer</th>
<th>Seed</th>
<th>1Total</th>
<th>212-month rolling total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>tons/year</strong></td>
<td><strong>tons produced</strong></td>
<td><strong>composite emission factor</strong></td>
<td><strong>tons produced</strong></td>
<td><strong>composite emission factor</strong></td>
<td><strong>tons produced</strong></td>
<td><strong>composite emission factor</strong></td>
</tr>
<tr>
<td><strong>example</strong></td>
<td>3.75</td>
<td>1.0</td>
<td>0.1650</td>
<td>0.3019</td>
<td>0.7017</td>
<td>4.919</td>
</tr>
<tr>
<td></td>
<td>3.75</td>
<td>0.1650</td>
<td>0.3019</td>
<td>0.7017</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.75</td>
<td>0.1650</td>
<td>0.7017</td>
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<td>0.7017</td>
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<tr>
<td></td>
<td>3.75</td>
<td>0.1650</td>
<td>0.7017</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Multiply the tons produced by the corresponding emission factor, and add tons/year from Grain, Feed, Fertilizer, and Seed.

2. Add the monthly total for the preceding 11 months to the total for this month. Less than 15.0 tons/year indicates compliance.
Mr. Alan Mahoney  
SER Manager  
MFA Agri Service - Mexico  
2816 E. Liberty  
Mexico, MO 65265


Dear Mr. Mahoney:

Enclosed with this letter is your permit to construct. 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 is necessary for continued compliance. No Operating Permit is required as a result of this permit.

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 Mrs. Jeannie Kozak at the department’s Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale  
New Source Review Unit Chief

KBH:jkl

Enclosures

c: Northeast Regional Office Regional Office  
PAMS File 2007-07-030  
Permit Number: