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: 082007-009 Project Number: 2007-05-071

Parent Company: MFA Incorporated

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

Installation Name: MFA Agri Service-Bernie

Installation Address: 311 N. Drake, P.O. Box 220, Bernie, MO 63822

Location Information: Stoddard County, S3, T23N, R10E

Application for Authority to Construct was made for:
The installation of a temporary corn storage pile and associated grain receiving, handling, and shipping equipment. 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.

AUG - 9 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 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 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-Bernie
Stoddard County, S3, T23N, R10E
1. Emission Limitation
   A. MFA Agri Service-Bernie 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 temporary storage pile and associated equipment.

   B. MFA Agri Service-Bernie shall maintain an accurate record of PM$_{10}$ emitted into the atmosphere from the temporary storage pile and associated equipment. Attachment A or an equivalent form shall be used for this purpose. MFA Agri Service-Bernie shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Department of Natural Resources’ personnel upon request.

   C. MFA Agri Service-Bernie 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.B indicate that the source exceeds the limitation of Special Condition Number 1.A.
MFA Agri Service-Bernie
311 N. Drake
P.O. Box 220
Bernie, MO 63822

Parent Company:
MFA Incorporated
201 Ray Young Drive
Columbia, MO 65201

Stoddard County, S3, T23N, R10E

REVIEW SUMMARY

- MFA Agri Service-Bernie has applied for authority to install a temporary corn storage pile and associated grain receiving, handling, and shipping equipment.

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

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

- None of the National Emission Standards for Hazardous Air Pollutants or currently promulgated Maximum Achievable Control Technology 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 particulate matter less than ten (10) microns in aerodynamic diameter (PM$_{10}$) are conditioned to de minimis levels.

- This installation is located in Stoddard 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 potential emissions of the application are below de minimis levels.

• Emissions testing is not required for the equipment.

• A Basic Operating Permit application is required for this installation within 30 days of equipment startup.

• Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

MFA Agri Service operates a grain processing installation, which is an existing minor source of PM10 and holds a basic operating permit, in Stoddard County. This installation contains an elevator and associated equipment of two dry bulk fertilizer plants and a seed cleaning operation.

The following construction permits have been issued to MFA Agri Service-Bernie from the Air Pollution Control Program.

Table 1: Previously Issued Construction Permits

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0377-006</td>
<td>Fertilizer</td>
</tr>
<tr>
<td>0398-005</td>
<td>Grain, fertilizer and seed facility</td>
</tr>
</tbody>
</table>

PROJECT DESCRIPTION

MFA has applied for authority to construct a temporary storage pile for corn. The pile will cover an area approximately 130 feet by 320 feet and will be four feet high. Corn will be loaded into the pile by conveyor and unloaded from the pile with a screw auger at a rate of 280 tons per hour. A tarp held in place by a negative fan system will cover the pile.

Table 2: New Emission Points

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Description</th>
<th>Maximum Hourly Design Rate</th>
<th>Emission Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-14</td>
<td>Haul Road</td>
<td>2.24 lb/VMT</td>
<td>2.080 lb/VMT</td>
</tr>
<tr>
<td>TS-1</td>
<td>Grain Receiving</td>
<td>280 ton/hr</td>
<td>0.059 lb/ton</td>
</tr>
<tr>
<td>TS-2</td>
<td>Grain Handling</td>
<td>280 ton/hr</td>
<td>0.034 lb/ton</td>
</tr>
<tr>
<td>TS-3</td>
<td>Grain Shipping</td>
<td>280 ton/hr</td>
<td>0.029 lb/ton</td>
</tr>
</tbody>
</table>

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 Elevators and Processes*, May 2003. 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 3: 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>PM10</td>
<td>15.0</td>
<td>&lt; 15</td>
<td>0.6089</td>
<td>170.01</td>
<td>&lt; 15</td>
</tr>
<tr>
<td>SOx</td>
<td>40.0</td>
<td>0.06</td>
<td>N/D</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NOx</td>
<td>40.0</td>
<td>12.89</td>
<td>N/D</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>0.26</td>
<td>N/D</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>3.22</td>
<td>N/D</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; N/D = Not Determined
* Existing Potential Emissions represent the conditioned emissions from permit 0398-005.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Potential emissions of particulate matter less than ten (10) microns in aerodynamic diameter (PM10) are conditioned to de minimis levels.

APPLICABLE REQUIREMENTS

MFA Agri Service-Bernie 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.

- **Operating Permits**, 10 CSR 10-6.065

- **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.

_____________________________  __________________________
Michael Mittermeyer                     Date
Environmental Engineer

**PERMIT DOCUMENTS**

The following documents are incorporated by reference into this permit:

• The Application for Authority to Construct form, dated 5/14/2007, received 5/14/2007, designating MFA Incorporated as the owner and operator of the installation.


• Southeast Regional Office Site Survey, dated 5/21/2007.
Attachment A – PM$_{10}$ Compliance Worksheet for Temporary Corn Storage Pile

MFA Agri Service-Bernie  
Stoddard County, S3, T23N, R10E  
Project Number: 2007-05-071  
Installation ID Number: 207-0015  
Permit Number: _______

This sheet covers the period from ______________ to ______________.

<table>
<thead>
<tr>
<th>Month</th>
<th>Grain Received (tons)</th>
<th>PM$_{10}$ Emission Factor (lb/ton)</th>
<th>$^{1}$PM$_{10}$ Emissions (lb)</th>
<th>$^{2}$PM$_{10}$ Emissions (tons)</th>
<th>$^{3}$12-Month Total PM$_{10}$ Emissions (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>15,400</td>
<td>0.1386</td>
<td>2,134.44</td>
<td>1.07</td>
<td>2.53</td>
</tr>
</tbody>
</table>

Note 1: Calculate PM$_{10}$ emissions (lb) by multiplying the grain received (tons) by the PM$_{10}$ emission factor (lb/ton)  
Note 2: Calculate PM$_{10}$ emissions (tons) by dividing the PM$_{10}$ emissions (lb) by 2000  
Note 3: Calculate the 12-month total PM$_{10}$ emissions by adding the PM$_{10}$ emissions (tons) to the sum of the previous 11 months PM$_{10}$ emissions (tons)
Mr. Alan Mahoney  
SER Manager  
MFA Agri Service-Bernie  
P.O. Box 220  
311 N. Drake  
Bernie, MO 63822


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 contact Michael Mittermeyer or me with the department’s Air Pollution Control Program at P.O. Box 176, Jefferson City, MO 65102 or telephone (573) 751-4817. Thank you for your time and attention.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale  
New Source Review Unit Chief

KBH: mmk

Enclosure

c: Southeast Regional Office  
PAMS File: 2007-05-071

Permit Number: