

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

PERMIT BOOK

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: 092009-007 Project Number: 2009-06-058

Parent Company: MFA Incorporated

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

Installation Name: MFA Agri Service - Lancaster

Installation Address: Hwy 63 North, Rt. 1, Box 50, Lancaster, MO 63548

Location Information: Schuyler County, S12, T66N, R15W

Application for Authority to Construct was made for:  
Installing two hopper bottom bulk feed storage bins. 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.

SEP 21 2009

EFFECTIVE DATE

A handwritten signature in black ink, appearing to read "James L. Kavanagh".  
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 devices 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 source(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 source(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

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Project No.	2009-06-058

**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 - Lancaster  
Schuyler County, S12, T66N, R15W

1. **Superseding Condition**  
The conditions of this permit supersede all special conditions found in the previously issued construction permit (Permit Number 092001-011) from the Air Pollution Control Program.
2. **Emission Limitation**
  - A. MFA Agri Service - Lancaster shall emit less than 15.0 tons of particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>) in any consecutive 12 month period from the entire installation. For the purposes of this special condition, entire installation encompasses all equipment at the installation at the time this permit's issuance.
  - B. MFA Agri Service - Lancaster shall maintain an accurate record of PM<sub>10</sub> emitted into the atmosphere from the entire installation. Attachment A or an equivalent form shall be used for this purpose. MFA Agri Service - Lancaster 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 - Lancaster 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 2B indicate that the source exceeds the limitation of Special Condition 2A.
3. MFA Agri Service – Lancaster shall water haul roads whenever conditions exist which would cause visible fugitive emissions to enter the ambient air beyond the property boundary

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE  
SECTION (5) REVIEW

Project Number: 2009-06-058  
Installation ID Number: 197-0003  
Permit Number:

MFA Agri Service - Lancaster  
Hwy 63 North  
Lancaster, MO 63548

Complete: 09-03-2009

Parent Company:  
MFA Incorporated  
201 Ray Young Drive  
Columbia, MO 65201  
Schuyler County, S12, T66N, R15W

REVIEW SUMMARY

- MFA Agri Service - Lancaster has applied for authority to Install two hopper bottom bulk feed storage bins.
- 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<sub>10</sub> are below de minimis levels.
- This installation is located in Schuyler 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.

- No Operating Permit is required for this installation.
- Approval of this permit is recommended without special conditions.

### INSTALLATION DESCRIPTION

MFA Agri Service - Lancaster has applied for authority to Install two hopper bottom bulk feed storage bins at their fertilizer facility north of Lancaster, Missouri. The bins will be filled by bulk feed delivery truck and then smaller amounts loaded out as needed into customer trucks or MFA feed delivery truck. The unloading augers are rated at 24 tons per hour which becomes the bottleneck for the entire process. Currently the installation has been issued a De minimis source of PM<sub>10</sub> permit and no operating permit has been issued to the installation.

MFA Agri Service - Lancaster has voluntarily accepted a installation wide limit of less than 15 tons per year of PM<sub>10</sub>. With this limitation, the installation will not be required to submit an operating permit application and will not need to perform an ambient air quality modeling.

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

Permit Number	Description
092001-011	Section 5 Construction Permit

### PROJECT DESCRIPTION

This project consists of three (3) PM<sub>10</sub> emission points: Haul Road (EP-4), Bulk Feed Receiving (EP-10) and Bulk Feed Loadout (EP-11). No air pollution control equipment is being used in association with the new equipment

### 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 1: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM <sub>10</sub>	15.0	< 15	N/A	5.63	* < 15.0
SO <sub>x</sub>	40.0	N/A	N/A	N/A	N/A
NO <sub>x</sub>	40.0	N/A	N/A	N/A	N/A
VOC	40.0	N/A	N/A	N/A	N/A
CO	100.0	N/A	N/A	N/A	N/A
HAPs	10.0/25.0	N/A	N/A	N/A	N/A

N/A = Not Applicable

\* This limit is an installation wide limit that includes the existing permit/s PM<sub>10</sub> limit, and this limit was voluntarily requested by the installation

### 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 PM<sub>10</sub> are below de minimis levels.

### APPLICABLE REQUIREMENTS

MFA Agri Service - Lancaster 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

#### SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400

## 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 without special conditions.

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Samer Al-Shoukhi  
Environmental Engineer

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Date

### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated June 18, 2009, received July 19, 2009, designating MFA Incorporated as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- NERO Regional Office Site Survey, dated July 7, 2009.

## Attachment A – PM<sub>10</sub> Compliance Worksheet

MFA Agri Service - Lancaster  
 Schuyler County, S12, T66N, R15W  
 Project Number: 2009-06-058  
 Installation ID Number: 197-0003  
 Permit Number: \_\_\_\_\_

Copy this sheet as needed

Emission Step Description	<sup>1</sup> Monthly Throughput (tons)	<sup>2</sup> Emission Factor	Emission Factor Units	<sup>3</sup> Monthly PM <sub>10</sub> Emissions (pounds)
Grain Receiving		0.0831	Pounds of PM <sub>10</sub> / ton of grain	
Grain Shipping		0.0531	Pounds of PM <sub>10</sub> / ton of grain	
Fertilizer. Receiving		0.0421	Pounds of PM <sub>10</sub> / ton of fertilizer	
Fertilizer. Shipping		0.0421	Pounds of PM <sub>10</sub> / ton of fertilizer	
Feed Receiving		0.0246	Pounds of PM <sub>10</sub> / ton of feed	
Feed Shipping		0.0511	Pounds of PM <sub>10</sub> / ton of feed	
<b><sup>4</sup> Total Monthly PM<sub>10</sub> Emissions (pounds)</b>				
<b><sup>5</sup> Monthly PM<sub>10</sub> Emissions (tons)</b>				
<b><sup>6</sup> Cumulative 12 Month PM<sub>10</sub> Emissions (tons)</b>				

<sup>1</sup> Monthly Throughput in tons of material.

<sup>2</sup> The respective PM<sub>10</sub> Emission Factor based on the activity.

<sup>3</sup> Individual Monthly PM<sub>10</sub> Emissions (pounds) calculated by multiplying the Monthly Throughput by the respective Emission Factor.

<sup>4</sup> Total Monthly PM<sub>10</sub> Emissions (pounds) calculated by summing the individual Monthly PM<sub>10</sub> Emissions (pounds) from each Emission Step Description.

<sup>5</sup> Monthly PM<sub>10</sub> Emissions (tons) calculated by dividing Total Monthly PM<sub>10</sub> Emissions (pounds) by 2,000.

<sup>6</sup> Cumulative 12 Month PM<sub>10</sub> Emissions (tons) calculated by summing this month's PM<sub>10</sub> Emissions (tons) with the previous eleven months' PM<sub>10</sub> Emissions (tons). A cumulative total of less than 15.0 tons for any twelve month period indicates compliance.

Mr. Alan Mahoney  
SER Manager  
MFA Agri Service - Lancaster  
Hwy 63 North  
Lancaster, MO 63548

RE: New Source Review Permit - Project Number: 2009-06-058

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.

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 Samer Al-Shoukhi 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:sak

Enclosures

c: Northeast Regional Office  
PAMS File: 2009-06-058  
Permit Number: