

PERMIT BOOK

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: 082009-014 Project Number: 2009-07-004

Parent Company: MFA Incorporated

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

Installation Name: MFA Agri Sevice - Martinsburg

Installation Address: 15778 Audrain Rd 741, Martinsburg, MO 65264

Location Information: Audrain County, S14, T50N, R7W

Application for Authority to Construct was made for:

This project consists of re-evaluating the Potential To Emit of facility the installation of a bulk dry fertilizer receiving system, dry fertilizer blender and loadout conveyor. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

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

AUG 31 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 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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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 Sevice - Martinsburg
Audrain County, S22, T24N, R8

1. Emission Limitation
 - A. MFA Agri Sevice - Martinsburg shall emit less than 15.0 tons of particulate matter less than ten (10) microns in diameter (PM₁₀) 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 Sevice - Martinsburg shall maintain an accurate record of PM₁₀ emitted into the atmosphere from the entire installation. Attachment A or an equivalent form shall be used for this purpose. MFA Agri Sevice - Martinsburg 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 Sevice - Martinsburg 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 1B indicate that the source exceeds the limitation of Special Condition 1A.

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

Project Number: 2009-07-004
Installation ID Number: 007-0013
Permit Number:

MFA Agri Sevice - Martinsburg
15778 Audrain Road 741
Martinsburg, MO 65264

Complete: July 07, 2009

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

Audrain County, S14, T50N, R7W

REVIEW SUMMARY

- MFA Agri Sevice - Martinsburg has requested to re-evaluate the potential to emit of their facility including the bulk dry fertilizer rail and truck receiving system, dry fertilizer blender and loadout conveyer.
- 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 PM₁₀ are conditioned to 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 potential emissions of the application are conditioned to below de minimis levels.
- An emission 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/PROJECT DESCRIPTION

This is a bulk fertilizer blending plant. Material arrives by rail car or by truck. The rail cars are unloaded via the bottom of the rail car. It is transported by a closed conveyor system to an enclosed storage bins. Material is removed at the bottom of bins utilizing cloth – sock filters to prevent particulate and product losses.

Permit number 0377-005 was issued to this plant in 1977, it had an allowable emissions rate of 5.31 tons per year. This allowable emission rate was no longer valid. The original permit listed only rail receiving. The installation has both rail and truck receiving but can not operate at same time. The previous permit had an allowable rate of 40 tons per hour. The new application set this receiving rate at 60 tons per hour. The mixer is the choke point of the plant it is limited at 45 tons per hour. The choke point was used to establish the PTE of 45 tons per hour for the entire site. Calculations were based on the assumption that the maximum Hourly Design Rate (MHDR) of the equipment associated with this installation is 45 tons of fertilizer due to the maximum hourly design rate of the mixer of 45 tons per hour.

MFA Feed & Fertilizer has voluntarily accepted a limit of less than 15 tons per year of PM₁₀. 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 dry fertilizer product will be delivered by semi-truck and unloaded onto a belt conveyor which will then discharge into a bucket elevator and transfer into an overhead auger system in the building. The dry fertilizer will then be dropped into one of 12 storage bays. The dry fertilizer will then be transferred by bucket loader to a vertical mixer located outside the south door of the plant. The mixed product will then be transferred by belt conveyor to awaiting trucks and card spreaders.

The installation will be using electrical power for operating the equipment.

EMISSIONS/CONTROLS EVALUATION

PM₁₀ is the main air pollutant of concern for this project. PM₁₀ emissions will be emitted from the fertilizer handling, blending and load in and load out operations. Fugitive PM₁₀ emissions will also be emitted from vehicular traffic on the unpaved haul roads.

The emission factor 0.02 pounds per ton was used for the fertilizer handling, blending and load in and load out operations.

The unpaved haul road emission factor was calculated from information obtained from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors, fifth Edition, 13.2.2, Unpaved Roads (9/98)*.

Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8,760 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 (year 2001)	Potential Emissions of the Application	New Installation Conditioned Potential
PM ₁₀	15.0	N/A	0.54	19.43	< 15.0
SO _x	40.0	N/A	N/A	N/A	N/A
NO _x	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

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 PM₁₀ were limited by the conditions of this permit to below de minimis levels.

APPLICABLE REQUIREMENTS

MFA Agri Sevice - Martinsburg 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

AMBIENT AIR QUALITY IMPACT ANALYSIS

Ambient air quality modeling was not performed since potential emissions of the application were limited to below de minimis levels

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.

Tim Hines
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated June 06, 2009, received June 30, 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.
- Southeast Regional Office Regional Office Site Survey.

Mr. Alan Mahoney
SER Manager
MFA Agri Service - Martinsburg
15778 Audrain Rd. 741
Martinsburg, MO 65264

RE: New Source Review Permit - Project Number: 2009-07-004

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 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 Tim Hines 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:thl

Enclosures

c: Southeast Regional Office
PAMS File: 2009-07-004

Permit Number: