

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT BOOK

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: 122006-019 Project Number: 2006-10-084

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 an addition of a bulk seed treatment operation to an existing installation. 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.

DEC 28 2006

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 department's 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 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 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.

Page No.	3
Permit No.	
Project No.	2006-10-084

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 – Particulate Matter Less Than Ten Microns in Diameter (PM₁₀)
 - A. MFA Agri Service - Mexico shall emit less than 15 tons of particulate matter less than ten (10) microns in diameter (PM₁₀) in any consecutive 12 month period from the bulk seed treatment operation.
 - B. MFA Agri Service - Mexico shall maintain an accurate record of PM₁₀ emitted into the atmosphere from the seed treatment operation. 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 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 Special Condition Number 1B indicate that the source exceeds the limitation of Special Condition Number 1A.
2. Use of Fungicide as Control Device
MFA Agri Service – Mexico shall apply fungicide at the seed treater (EP-21) whenever the seed treatment operation is in production.
3. Restriction on the Use of Diesel Engine(s)
MFA Agri Service – Mexico shall power the seed treatment operation using primary electrical power. No diesel engine(s) shall be used for the seed treatment operation.

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

Project Number: 2006-10-084
Installation ID Number: 007-0036
Permit Number:

MFA Agri Service - Mexico
2816 E. Liberty
Mexico, MO 63625

Complete: October 19, 2006

Reviewed: November 21, 2006

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

Audrain County, S31, T51N, R8W

REVIEW SUMMARY

- MFA Agri Service - Mexico has applied for authority to construct a bulk seed treatment operation.
- 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.
- Use of fungicide will control particulate matter less than ten microns in diameter (PM₁₀) from some of 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 for the bulk seed treatment operation.
- 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 limited to below de minimis levels for the bulk seed

treatment operation.

- Emissions testing is not required for the equipment.
- Revision to the Basic Operating Permit application is required for this installation within 30 days of new equipment startup.
- 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 and grains. The following permits have been issued to the installation.

Table 1: List of Issued Permits

Permit Number	Completion Date	Description
1093-020	10/13/1993	Modification of the installation to add a new suspension fertilizer blending and storage facility.
OP2001-102	08/23/2001	Basic Operating Permit Application.
2006-04-080	11/21/2006	Basic Operating Permit Renewal

PROJECT DESCRIPTION

MFA Agri Service – Mexico is adding a bulk seed treatment operation to an existing installation. The operation consists of four (4) ninety-ton hopper bottom storage bins, four (4) transfer conveyors, and a seed treater.

The seeds are delivered to the operation by hopper trucks and dumped onto a transfer conveyor (EP-18). The transfer conveyor feeds the seeds into four (4) ninety-ton hopper bottom storage bins (EP-19). From the bins, the seeds are conveyed to the seed treater by conveyors (EP-20). The seed treater applies fungicide to the seeds and dumps them off to another conveyor (EP-21). The conveyor delivers the final product to trucks for loadout (EP-22). The equipment are powered using electrical lines and not diesel engines.

The receiving operation has a maximum hourly design rate (MHDR) of 36 tons per hour, while the treatment and loadout are limited to a rate of 30 tons per hour. The application of the fungicide limits the PM₁₀ emissions from the treater and loadout process and should be considered a control device.

EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis are 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). Existing potential emissions are obtained from Operating Permit No. 2006-04-080 and not from previously issued construction permits because potential emissions of the entire installation were never calculated in these construction permits. Existing actual emissions are taken from the 2005 Emission Inventory Questionnaire (EIQ).

The following table provides an emissions summary for this project.

Table 1: Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions	Existing Actual Emissions (2005 EIQ)	Potential Emissions of the Application	New Application Conditioned Potential	Emission Factors (lbs/ton)
PM ₁₀	15.0	59.91	0.99	62.20	<15	0.4734
SO _x	40.0	0.04	N/A	N/A	N/A	N/A
NO _x	40.0	7.49	N/A	N/A	N/A	N/A
VOC	40.0	0.10	N/A	N/A	N/A	N/A
CO	100.0	1.26	N/A	N/A	N/A	N/A
HAPs	10.0/25.0	N/A	N/A	N/A	N/A	N/A

*N/A = Not Applicable

AP-42 does not give emission factors from seed treatment plants. It was determined, however, emissions from seed treatment plants can be approximated by using emission factors for grain elevators. The seed treater and the conveyor immediately following the seed treater are given a control efficiency of 50% because the fungicide can act as a dust suppressant to control PM₁₀ emissions. There are no other control measures being used to control fugitive emissions.

The seed treatment operation shall not emit more than 15 tons of PM₁₀ in any consecutive twelve (12) month period. This corresponds to an annual production of 63,371 tons.

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 emissions of PM₁₀ are conditioned to below de minimis levels.

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.
- *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.

Chia-Wei Young
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated October 17, 2006, received October 19, 2006, 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.
- Northeast Regional Office Site Survey, dated October 26, 2006.

Mr. Alan Mahoney
Safety, Environmental & Regulatory Manager
MFA Agri Service - Mexico
2816 E. Liberty
Mexico, MO 65265

RE: New Source Review Permit - Project Number: 2006-10-084

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 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, please contact me at (573) 751-4817, or write the Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102. Thank you for your time and attention.

Thank you,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KBH: cwyk

Enclosures

c: Northeast Regional Office
PAMS File 2006-10-084

Permit Number: