

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: 11 2 0 0 9 - 0 0 6 Project Number: 2009-08-011

Parent Company: MFA Incorporated

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

Installation Name: MFA Agri Service-Conception Junction

Installation Number: 147-0021

Installation Address: 616 S. Main St., Conception Junction, MO 64434

Location Information: Nodaway County, S14, T63N, R34W

Application for Authority to Construct was made for:
Installation of a new overhead grain bin for shipping. 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.

NOV 17 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 within 30 days of actual startup. 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 Service-Conception Junction
Nodaway County, S14, T63N, R34W

1. Emission Limitation
 - A. MFA Agri Service-Conception Junction 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 (see table 1).
 - B. Attachment A or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 1.A.
2. Record Keeping and Reporting Requirements
 - A. MFA Agri Service-Conception Junction 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.
 - B. MFA Agri Service-Conception Junction shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten days after the end of the month during which any record required by this permit show an exceedance of a limitation imposed by this permit.

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

Project Number: 2009-08-011
Installation ID Number: 147-0021
Permit Number:

MFA Agri Service-Conception Junction
616 S. Main St.
Conception Junction, MO 64434

Complete: August 10, 2009

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

Nodaway County, S14, T63N, R34W

REVIEW SUMMARY

- MFA Agri Service-Conception Junction has applied for authority to install a new overhead grain bin for shipping.
- Hazardous Air Pollutant (HAP) emissions are not expected from the proposed equipment.
- None of the New Source Performance Standards (NSPS) apply to the installation. Specifically, Subpart X does not apply because the installation does not store granular triple superphosphate produced within the preceding 72 hours and Subpart DD does not apply because the installation's capacity is less than 2,500,000 bushels.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) apply to this installation. None of the 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 below de minimis levels.
- This installation is located in Nodaway County, an attainment area for all criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and

fugitive emissions are not counted toward major source applicability.

- Ambient air quality modeling was not performed since potential emissions of the application are below de minimis levels.
- Emissions testing are 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-Conception Junction is an existing grain handling facility built before 1983, so it was not required to obtain a construction permit. The installation consists of three separate operations: a country grain elevator, a bulk feed station and a bulk fertilizer plant. The grain elevator is made up of a receiving pit, four storage bins, an elevator, grain handling legs and a loadout leg. The grain elevator has an hourly capacity of 180 tons of grain per hour (based on a 60 pound bushel). The bulk feed station receives feed, elevates it into bins and loads feed out to customers. The bulk feed station has an hourly capacity of 45 tons of feed per hour. The bulk fertilizer plant receives fertilizer components and mixes them for sale to customers. The fertilizer plant has a capacity of 60 tons per hour.

In 2003, the Air Pollution Control Program issued an operating permit determination for the facility. The Program determined, based on the information that was provided, that no operating permit was required because the installations emissions were below de minimis levels. As part of the review for this permit, the potential emissions of the installation were recalculated. The existing installation’s potential to emit is greater than de minimis levels, but below major source levels.

No permits have been issued to MFA Agri Service-Conception Junction from the Air Pollution Control Program.

Table 1: Installation Equipment

Emission Unit ID	Description
1	Feed receiving
2a	Feed storage bins
2b	Feed handling
3	Feed shipping
4	Grain receiving
11a	Grain storage bins
11b	Grain handling
6	Grain shipping
7	Fertilizer receiving
8	Fertilizer storage
12	Fertilizer hopper
13	Fertilizer mixer
14	Fertilizer handling
9	Fertilizer loadout

PROJECT DESCRIPTION

MFA Agri Service-Conception Junction has applied for authority to construct an overhead loadout bin at the grain elevator. This bin has a loadout capacity of 180 tons per hour and is connected to the existing grain handling equipment. The equipment is uncontrolled.

MFA Agri Service-Conception Junction has requested a installation wide de minimis limit to avoid operating permit requirements.

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 9.1.1 "Grain Elevators," April 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 2: Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions	Existing Actual Emissions (2003 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM ₁₀	15.0	195.0	0.31	12.47	< 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; N/D = Not Determined

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 are conditioned below de minimis levels.

APPLICABLE REQUIREMENTS

MFA Agri Service-Conception Junction 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 with/without special conditions.

Michael Mittermeyer
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated August 10, 2009, received August 10, 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.

- Kansas City Regional Office Site Survey, dated August 24, 2009.

**Attachment A
PM10 Compliance Worksheet**

MFA Agri Service-Conception Junction
 Nodaway County, S14, T63N, R34W
 Project Number: 2009-08-011
 Installation ID Number: 147-0021
 Permit Number: _____

This sheet covers the period from _____
 (month, year)

Activity Description	¹ Monthly Throughput (tons)	Composite PM10 Emissions Factor (lb/throughput)	² PM10 Emissions (pounds)	³ PM10 Emissions (tons)
Grain Received		0.1073		
Grain Shipped		0.0370		
Feed Received		0.0508		
Feed Shipped		0.0088		
Fertilizer Received		0.0497		
Fertilizer Shipped		0.0882		
⁴ Total Monthly PM10 Emissions (tons)				
⁵ 12-Month Total PM10 Emissions (tons)				

¹Enter the Monthly Throughput for each activity in the units specified.
²Multiply the Monthly Throughput by the Composite PM10 Emissions Factor.
³Divide the PM10 Emissions (pounds) by 2000
⁴Add the PM10 Emissions (tons)
⁵Add the Total Monthly PM10 Emissions to the sum of the Total Monthly PM10 Emissions from the previous 11 months. A 12-Month Total PM10 Emissions (tons) less than 15.0 tons is necessary for compliance.

Mr. Alan Mahoney
SER Manager
MFA Agri Service-Conception Junction
201 Ray Young Drive
Columbia, MO 65201

RE: New Source Review Permit - Project Number: 2009-08-011

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 do not hesitate to contact Michael Mittermeyer, at the Departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (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:mml

Enclosures

c: Kansas City Regional Office
PAMS File: 2009-08-011

Permit Number: