

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: **052015-001**

Project Number: 2015-02-043
Installation Number: 063-0001

Parent Company: MFA, Inc.

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

Installation Name: MFA Agri Service - Maysville

Installation Address: 1302 South Water Street, Maysville, MO 64469

Location Information: DeKalb County, S34, T59N, R31W

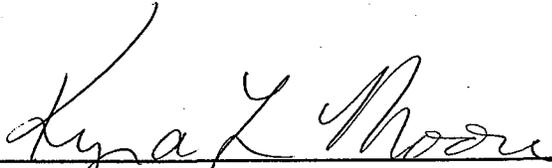
Application for Authority to Construct was made for:
Increasing the handling throughputs for the facility by removing previous throughput limitations.
This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

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

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

MAY - 1 2015

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 startup of these air contaminant sources. 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 startup of these air contaminant sources.

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 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.	2015-02-043

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 - Maysville
DeKalb County, S34, T59N, R31W

1. Superseding Condition
 - A. The conditions of this permit supersede all the special conditions found in the previously issued Construction Permit 1090-002 issued by the Air Pollution Control Program.

2. PM₁₀ Emission Limitation
 - A. MFA Agri Service - Maysville shall emit less than 15.0 tons of PM₁₀ in any consecutive 12-month period from the entire installation. The table below lists all emission points in the installation.

Table 1. Installation Emission Points

Emission Point	Description	Emission Point	Description
EP-1a	Grain Receiving	EP-9	Bulk Feed Loadout - South
EP-1b	Feed Receiving	EP-10	Fertilizer Receiving
EP-2	Bucket Elevator	EP-11	Fertilizer Storage Transfer
EP-3a	Grain Dryer	EP-12	Fertilizer Loadout
EP-3b	Grain Dryer LP Combustion	EP-13	Haul Road
EP-5	Grinder	EP-14a	Grain Storage Bins
EP-6a	Grain Loadout	EP-14b	Feed Storage Bins
EP-6b	Feed Loadout	EP-15	Fertilizer Weigh Hopper
EP-7	Bulk Feed Receiving - South	EP-16	Fertilizer Mixer

- 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 2.A.

3. Record Keeping and Reporting Requirements
 - A. MFA Agri Service - Maysville shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.

Page No.	4
Permit No.	
Project No.	2015-02-043

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- B. MFA Agri Service - Maysville shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 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 (6) REVIEW

Project Number: 2015-02-043

Installation ID Number: 063-0001

Permit Number:

MFA Agri Service - Maysville
1302 South Water Street
Maysville, MO 64469
DeKalb County, S34, T59N, R31W

Complete Date
of Application: March 5, 2015

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

REVIEW SUMMARY

- MFA Agri Service - Maysville has applied for authority to increase handling throughputs for the facility by removing previous throughput limitations.
- The only HAP emissions expected from the equipment are insignificant amounts resulting from combustion of liquefied petroleum gas in the grain dryer (EP-3b).
- None of the NSPS apply to the installation.
- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.
- No air pollution control devices are being used in association with the equipment.
- This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM are above the de minimis level, but below the major source level. Potential emissions of all other criteria pollutants are below their respective de minimis levels.
- This installation is located in DeKalb 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.
- Emissions 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 DESCRIPTION

MFA, Inc. operates a grain elevator, bulk feed storage facility, and fertilizer distribution center in Maysville, Missouri. The maximum hourly design rate (MHDR) of the grain elevator is 180 tons per hour. Feed is brought in by tractor trailer, stored in tanks, and unloaded in smaller quantities to be sold. The MHDR of feed processing is 24 tons per hour. Fertilizer is received and repackaged at the facility, at the MHDR of 60 tons per hour, but it is not processed on site. The installation has been limited to receiving no more than 10,000 tons of grain at the elevator and 7,500 tons of grain at the bulk storage facility per 12 month period, by Construction Permit 1090-002. The installation currently has a Basic Operating Permit, under Project 2013-07-033, which was issued August 16, 2013 and expires January 9, 2019. The following New Source Review permits have been issued to MFA Agri Service - Maysville from the Air Pollution Control Program:

Table 2: Permit History

Permit Number	Description
1090-002	New bulk feed storage facility

PROJECT DESCRIPTION

MFA, Inc. is responding to a Notice of Violation issued January 16, 2015 regarding an exceedance of a throughput limit established in the previous Construction Permit 1090-002. MFA, Inc. has made a request to remove the previous throughput limits, but impose a de minimis limit on PM₁₀, because the facility is able to handle more grain than the throughput limits allow, still without emitting over de minimis levels of PM₁₀. This project serves as a reassessment of the potential to emit for the facility, and it adjusts the special conditions of the permit to directly limit the necessary criteria pollutants instead of indirectly limiting them by a throughput cap.

EMISSIONS/CONTROLS EVALUATION

The emission factors used in this analysis were obtained from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources*, Fifth Edition.

Particulate emissions resulting from the receiving, handling, and loadout of grain, feed, and fertilizer were calculated using emission factors taken from the EPA's online emission factor database, WebFIRE.

Combustion emissions from the grain dryer (EP-3b) were calculated using emission factors from AP-42 Section 1.5 *Liquefied Petroleum Gas Combustion* (July 2008).

Emissions from haul roads were calculated using the predictive equation from AP-42 Section 13.2.2 *Unpaved Roads*, November 2006.

The following table provides an emissions summary for this project. Existing potential emissions were taken from the previous Construction Permit 1090-002 after accounting for

established throughput limits, but emissions from fertilizer operations, grain dryer combustion, and haul roads were not included. Existing actual emissions were taken from the installation's 2013 EIQ. Potential emissions of the application represent the potentials of the equipment after superseding the throughput limits in Construction Permit 1090-002, assuming continuous operation at the maximum design rate, and including emissions from fertilizer operations, grain dryer combustion, and haul roads. The new installation conditioned potential represents the subsequent potential of the equipment after instating the 15.0 ton per year limit for PM₁₀.

Table 3: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions ^a	Existing Actual Emissions (2013 EIQ)	Potential Emissions of the Application ^b	New Installation Conditioned Potential
PM	25.0	20.8	N/D	529.91	44.98
PM ₁₀	15.0	12.7	0.18	180.86	<15.0
PM _{2.5}	10.0	N/D	N/D	32.43	2.57
SO _x	40.0	N/D	N/D	0.004	0.004
NO _x	40.0	N/D	N/D	0.60	0.60
VOC	40.0	N/D	N/D	0.04	0.04
CO	100.0	N/D	N/D	0.34	0.34
HAPs	10.0 / 25.0	N/D	N/D	N/A	N/A

N/A = Not Applicable; N/D = Not Determined

^a Existing potential emissions account for the throughput limits established in permit 1090-002 but do not include emissions from fertilizer operations, combustion, or haul roads.

^b Potential emissions of the application were calculated after previous throughput limits were superseded and do include emissions from fertilizer operations, grain dryer combustion, and haul roads.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM are above the de minimis level, but below the major source level. Potential emissions of all other criteria pollutants are below their respective de minimis levels.

APPLICABLE REQUIREMENTS

MFA Agri Service - Maysville 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

- *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 10-6.165

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 (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Ryan Schott
New Source Review Unit

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated February 16, 2015, received February 17, 2015, designating MFA, Inc. as the owner and operator of the installation.

Attachment A – PM₁₀ Compliance Worksheet

MFA Agri Service - Maysville
 DeKalb County, S34, T59N, R31W
 Project Number: 2015-02-043
 Installation ID Number: 063-0001
 Permit Number: _____

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

Process Description	Emission Point	(a)	(b)	(c)
		Monthly Throughput (tons)	Composite Emission Factor (lb/ton)	Monthly PM10 Emissions (lbs)
Grain Received	EP-1a		0.227	
Feed Received	EP-1b		0.181	
Fertilizer Received	EP-10		0.144	
(d) Total Monthly PM₁₀ Emissions (lbs)				
(e) Total Monthly PM₁₀ Emissions (tons)				
(f) 12-Month PM₁₀ Emissions (h) from Previous Month's Attachment A (tons)				
(g) Total Monthly PM₁₀ Emissions (e) from Previous Year's Attachment A (tons)				
(h) Current 12-Month PM₁₀ Emissions (tons) (h) = [(e) + (f) – (g)]				

- (a) Record this month's throughput.
- (b) Composite Emission Factor is the total emission factor of each process at this installation.
- (c) Multiply the Monthly Throughput (a) by the respective Composite Emission Factor (b).
- (d) Sum each individual Monthly PM₁₀ Emissions.
- (e) Divide the Total Monthly PM₁₀ Emissions (d) by 2,000.
- (f) Record the 12-Month PM₁₀ Emissions (h) from the Previous Month's Attachment A.
- (g) Record the Total Monthly PM₁₀ Emissions (e) from the Previous Year's Attachment A.
- (h) Calculate the Current 12-Month PM₁₀ Emissions. A total less than **15.0 tons** indicates compliance.

APPENDIX A

Abbreviations and Acronyms

%	percent	m/s	meters per second
°F	degrees Fahrenheit	Mgal	1,000 gallons
acfm	actual cubic feet per minute	MW	megawatt
BACT	Best Available Control Technology	MHDR	maximum hourly design rate
BMPs	Best Management Practices	MMBtu	Million British thermal units
Btu	British thermal unit	MMCF	million cubic feet
CAM	Compliance Assurance Monitoring	MSDS	Material Safety Data Sheet
CAS	Chemical Abstracts Service	NAAQS ...	National Ambient Air Quality Standards
CEMS	Continuous Emission Monitor System	NESHAPs	National Emissions Standards for Hazardous Air Pollutants
CFR	Code of Federal Regulations	NO_x	nitrogen oxides
CO	carbon monoxide	NSPS	New Source Performance Standards
CO₂	carbon dioxide	NSR	New Source Review
CO_{2e}	carbon dioxide equivalent	PM	particulate matter
COMS	Continuous Opacity Monitoring System	PM_{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
CSR	Code of State Regulations	PM₁₀	particulate matter less than 10 microns in aerodynamic diameter
dscf	dry standard cubic feet	ppm	parts per million
EQ	Emission Inventory Questionnaire	PSD	Prevention of Significant Deterioration
EP	Emission Point	PTE	potential to emit
EPA	Environmental Protection Agency	RACT	Reasonable Available Control Technology
EU	Emission Unit	RAL	Risk Assessment Level
fps	feet per second	SCC	Source Classification Code
ft	feet	scfm	standard cubic feet per minute
GACT	Generally Available Control Technology	SDS	Safety Data Sheet
GHG	Greenhouse Gas	SIC	Standard Industrial Classification
gpm	gallons per minute	SIP	State Implementation Plan
gr	grains	SMAL	Screening Model Action Levels
GWP	Global Warming Potential	SO_x	sulfur oxides
HAP	Hazardous Air Pollutant	SO₂	sulfur dioxide
hr	hour	tph	tons per hour
hp	horsepower	tpy	tons per year
lb	pound	VMT	vehicle miles traveled
lbs/hr	pounds per hour	VOC	Volatile Organic Compound
MACT	Maximum Achievable Control Technology		
µg/m³	micrograms per cubic meter		

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

RE: New Source Review Permit - Project Number: 2015-02-043

Dear Mr. Mahoney:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions 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 were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty 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 administrative hearing commission, whose contact information is: website: www.oa.mo.gov/ahc.

If you have any questions regarding this permit, please contact Ryan Schott, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

SH:rs1

Enclosures

c: Kansas City Regional Office
PAMS File: 2015-02-043
Permit Number: