

**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: **06 2 0 1 7 - 0 0 3**

Project Number: 2017-03-109  
Installation Number: 145-7001

Parent Company: MFA Inc.

Parent Company Address: 201 Ray Young Dr., Columbia, MO 65201

Installation Name: MFA Agri Service - Neosho Fertilizer Plant

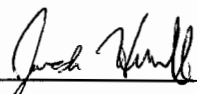
Installation Address: 11878 Lime Kiln Drive, Neosho, MO 64850

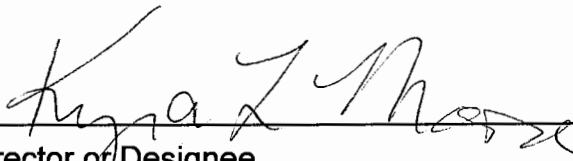
Location Information: Newton County, S 7, T 25N, R 31W

Application for Authority to Construct was made for:  
Adding an additional mixer to an existing grandfathered Fertilizer Plant. 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.

  
Prepared by  
Jordan Hull  
New Source Review Unit

  
Director or Designee  
Department of Natural Resources

**JUN 07 2017**

Effective Date

## 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 Enforcement and Compliance Section of 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 Enforcement and Compliance Section of 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 within 30 days of actual startup. Also, you must notify the Department's 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 the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department's 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 using the contact information below.

Contact Information:  
Missouri Department of Natural Resources  
Air Pollution Control Program  
P.O. Box 176  
Jefferson City, MO 65102-0176  
(573) 751-4817

The regional office information can be found at the following website:  
<http://dnr.mo.gov/regions/>

**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 - Neosho Fertilizer Plant  
Newton County, S 7, T 25N, R 31W

1. **PM<sub>10</sub> Emission Limitation**

- A. MFA Agri Service - Neosho Fertilizer Plant shall emit less than 15.0 tons of PM<sub>10</sub> in any consecutive 12-month period from the entire installation (see Table 1).

Table 1. List of Emission Points at MFA - Neosho Fertilizer Plant

Emission Point	Description
EP-01	Truck unloading
EP-02	Conveyor unloading into bays
EP-03	Fertilizer loaded into scale hopper from bay (skidster)
EP-03A	Fertilizer + herbicide loaded into a scale hopper from bay (skidster)
EP-04	Existing fertilizer mixer
EP-04A	New fertilizer + herbicide mixer
EP-05	Fertilizer unloaded on conveyor
EP-05A	Fertilizer+ herbicide unloaded onto conveyor
EP-06	Fertilizer loaded to truck
EP-06A	Fertilizer + herbicide loaded to truck
EP-07	Haul roads

- 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 Condition 1.A.

2. **Record Keeping and Reporting Requirements**

- A. MFA Agri Service - Neosho Fertilizer Plant 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.
- B. MFA Agri Service - Neosho Fertilizer Plant 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 shows an exceedance of a limitation imposed by this permit.

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

Project Number: 2017-03-109  
Installation ID Number: 145-7001  
Permit Number: 06 2 0 1 7 - 0 0 3

Installation Address:

MFA Agri Service - Neosho Fertilizer Plant  
11878 Lime Kiln Drive  
Neosho, MO 64850

Parent Company:

MFA Inc.  
201 Ray Young Dr.  
Columbia, MO 65201

Newton County, S 7, T 25N, R 31W

REVIEW SUMMARY

- MFA Agri Service - Neosho Fertilizer Plant has applied for authority to add an additional mixer to the existing fertilizer plant.
- The application was deemed complete on April 4, 2017.
- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.
- None of the New Source Performance Standards (NSPS) apply to the installation.
- 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 conditioned below the de minimis level.
- This installation is located in Newton 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 to determine the ambient impact of pollutants because emissions are limited below de minimis.
- Emissions testing is not required for the equipment as a part of this permit. Testing may be required as part of other state, federal or applicable rules.

- No Operating Permit is required for this installation.
- Approval of this permit is recommended with special conditions.

### INSTALLATION DESCRIPTION

MFA Agri Service –Neosho Fertilizer Plant is an existing, grandfathered dry fertilizer mixing installation located in Neosho, Missouri (Newton County). The installation currently operates under a basic operating permit.

No New Source Review permits have been issued to MFA Agri Service - Neosho Fertilizer Plant from the Air Pollution Control Program.

### PROJECT DESCRIPTION

MFA Agri Service – Neosho Fertilizer Plant is installing an additional fertilizer mixer and associated conveyor to be able to mix herbicide with the fertilizer. The process is bottlenecked by the receiving conveyor to 60 tph. The emissions are uncontrolled in this process. The truck loading and conveyor unloading of materials into the bays are the same for both fertilizer types but then the process splits into two process lines at the weigh hoppers (non-herbicide 36 tph and herbicide 24 tph).

Fertilizer is delivered to the facility by truck and offloaded at the receiving pit and conveyed into the storage bays. A skid steer then transfers the fertilizer to a scale hopper (EP-03, 03A) that drops the required amount of fertilizer into the fertilizer blenders (EP-04, 04A). After the fertilizer is successfully mixed, it leaves the blender on a conveyor (EP-05, 05A) and is loaded out onto a spreader cart or truck (EP-06,06A).

### EMISSIONS/CONTROLS EVALUATION

The emission factors used in this analysis were obtained from the EPA's WebFIRE database (SCC 3-01-027-09, Ammonium Nitrate Production Bulk Loading), (SCC 3-01-040-07, Urea Production Bulk Loading). All emission were considered uncontrolled.

Haul road emissions were calculated using the predictive equation found in AP-42 Section 13.2.2 Unpaved Roads (November 2006). In order to remain conservative, it was assumed that all receiving and shipping operations are carried out by straight trucks.

The following table provides an emissions summary for this project. Existing potential emissions are not available as the facility was grandfathered and has no previous construction permits. Existing actual emissions were taken from the installation's 2016 EIQ. Potential emissions of the application represent the potential of the whole installation assuming continuous operation (8760 hours per year). The new installation

conditioned potential represents the subsequent potential emissions of the entire facility after taking into account applicable special condition limitations.

Table 2: Emissions Summary (tpy)

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions	Existing Actual Emissions (2016 EIQ)	Potential emissions of the project (Additional Mixer and Associated Equipment)	Installation-wide Potential Emissions	New Installation Conditioned Potential
PM	25.0	N/A	N/D	8.41	46.83	22.54
PM <sub>10</sub>	15.0	N/A	0.13	7.15	31.15	<15.0
PM <sub>2.5</sub>	10.0	N/A	.013	2.52	9.90	4.77
SO <sub>x</sub>	40.0	N/A	N/A	N/A	N/A	N/A
NO <sub>x</sub>	40.0	N/A	N/A	N/A	N/A	N/A
VOC	40.0	N/A	N/A	N/A	N/A	N/A
CO	100.0	N/A	N/A	N/A	N/A	N/A
GHG (CO <sub>2</sub> e)	N/A	N/A	N/A	N/A	N/A	N/A
GHG (mass)	N/A	N/A	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; 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 PM<sub>10</sub> and PM are conditioned below de minimis levels.

#### APPLICABLE REQUIREMENTS

MFA Agri Service - Neosho Fertilizer Plant 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

- Per 10 CSR 10-6.110(4)(B)2.B(II) and (4)(B)2.C(II) a full EIQ is required for the first full calendar year the equipment (or modifications) approved by this permit are in operation.
- *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 (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, it is recommended that this permit be granted with special conditions.

#### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated March 23, 2017, received March 28, 2017, designating MFA Inc. as the owner and operator of the installation.

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

MFA Agri Service - Neosho Fertilizer Plant  
 Newton County, Neosho, MO  
 Project Number: 2017-03-109  
 Installation ID Number: 145-7001  
 Permit Number: **06 2 0 1 7 - 0 0 3**

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

Month	Production (tons)	Emission Factor (lb/ton)	Monthly Emissions <sup>1</sup> (lbs)	Monthly Emissions <sup>2</sup> (tons)	12-Month Total Emissions <sup>3</sup> (tons)
<i>Example (June)</i>	<i>12,000</i>	<i>0.103</i>	<i>1,236</i>	<i>0.618</i>	<i>1.2</i>
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			
		0.103			

<sup>1</sup>Multiply the monthly production by the emission factor.

<sup>2</sup>Divide the monthly emissions (lbs) by 2000.

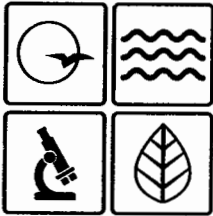
<sup>3</sup>Add the monthly emissions (tons) to the sum of the monthly emissions from the previous eleven months. Emission totals shall include the sum of all startup, shutdown, and malfunction emissions, as reported to the Air Pollution Control Program's Compliance & Enforcement Section. A total of less than 15.0 tons of PM<sub>10</sub> is necessary for compliance.



## APPENDIX A

### Abbreviations and Acronyms

<b>%</b> .....percent	<b>Mgal</b> .....1,000 gallons
<b>°F</b> .....degrees Fahrenheit	<b>MW</b> .....megawatt
<b>acfm</b> .....actual cubic feet per minute	<b>MHDR</b> .....maximum hourly design rate
<b>BACT</b> .....Best Available Control Technology	<b>MMBtu</b> ....Million British thermal units
<b>BMPs</b> .....Best Management Practices	<b>MMCF</b> .....million cubic feet
<b>Btu</b> .....British thermal unit	<b>MSDS</b> .....Material Safety Data Sheet
<b>CAM</b> .....Compliance Assurance Monitoring	<b>NAAQS</b> ....National Ambient Air Quality Standards
<b>CAS</b> .....Chemical Abstracts Service	<b>NESHAPs</b> National Emissions Standards for Hazardous Air Pollutants
<b>CEMS</b> .....Continuous Emission Monitor System	<b>NO<sub>x</sub></b> .....nitrogen oxides
<b>CFR</b> .....Code of Federal Regulations	<b>NSPS</b> .....New Source Performance Standards
<b>CO</b> .....carbon monoxide	<b>NSR</b> .....New Source Review
<b>CO<sub>2</sub></b> .....carbon dioxide	<b>PM</b> .....particulate matter
<b>CO<sub>2e</sub></b> .....carbon dioxide equivalent	<b>PM<sub>2.5</sub></b> .....particulate matter less than 2.5 microns in aerodynamic diameter
<b>COMS</b> .....Continuous Opacity Monitoring System	<b>PM<sub>10</sub></b> .....particulate matter less than 10 microns in aerodynamic diameter
<b>CSR</b> .....Code of State Regulations	<b>ppm</b> .....parts per million
<b>dscf</b> .....dry standard cubic feet	<b>PSD</b> .....Prevention of Significant Deterioration
<b>EIQ</b> .....Emission Inventory Questionnaire	<b>PTE</b> .....potential to emit
<b>EP</b> .....Emission Point	<b>RACT</b> .....Reasonable Available Control Technology
<b>EPA</b> .....Environmental Protection Agency	<b>RAL</b> .....Risk Assessment Level
<b>EU</b> .....Emission Unit	<b>SCC</b> .....Source Classification Code
<b>fps</b> .....feet per second	<b>scfm</b> .....standard cubic feet per minute
<b>ft</b> .....feet	<b>SDS</b> .....Safety Data Sheet
<b>GACT</b> .....Generally Available Control Technology	<b>SIC</b> .....Standard Industrial Classification
<b>GHG</b> .....Greenhouse Gas	<b>SIP</b> .....State Implementation Plan
<b>gpm</b> .....gallons per minute	<b>SMAL</b> .....Screening Model Action Levels
<b>gr</b> .....grains	<b>SO<sub>x</sub></b> .....sulfur oxides
<b>GWP</b> .....Global Warming Potential	<b>SO<sub>2</sub></b> .....sulfur dioxide
<b>HAP</b> .....Hazardous Air Pollutant	<b>tph</b> .....tons per hour
<b>hr</b> .....hour	<b>tpy</b> .....tons per year
<b>hp</b> .....horsepower	<b>VMT</b> .....vehicle miles traveled
<b>lb</b> .....pound	<b>VOC</b> .....Volatile Organic Compound
<b>lbs/hr</b> .....pounds per hour	
<b>MACT</b> .....Maximum Achievable Control Technology	
<b>µg/m<sup>3</sup></b> .....micrograms per cubic meter	
<b>m/s</b> .....meters per second	



Missouri Department of dnr.mo.gov

# NATURAL RESOURCES

Eric R. Greitens, Governor

Carol S. Comer, Director

**JUN 07 2017**

Mr. Stanley Thessen  
SER Manager  
MFA Agri Service - Neosho Fertilizer Plant  
201 Ray Young Dr.  
Columbia, MO 65201

RE: New Source Review Permit - Project Number: 2017-03-109

Dear Mr. Thessen:

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 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.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

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: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: [www.oa.mo.gov/ahc](http://www.oa.mo.gov/ahc).



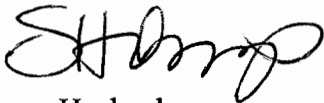
Recycled paper

Mr. Stanley Thessen  
Page Two

If you have any questions regarding this permit, please do not hesitate to contact Jordan Hull, at the Department of Natural Resources' 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



Susan Heckenkamp  
New Source Review Unit Chief

SH:shj

Enclosures

c: Southwest Regional Office  
PAMS File: 2017-03-109

Permit Number: **06 2017 - 003**