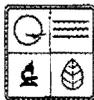


STATE OF MISSOURI



PERMIT 2013

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: **112013-001** Project Number: 2013-09-018
Installation Number: 101-0015

Parent Company: MFA Enterprises, Inc.

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

Installation Name: West Central Agri Service - Centerview

Installation Address: 103 South Main Street, Centerview, MO 64019

Location Information: Johnson County, S36, T46N, R27W

Application for Authority to Construct was made for:
Installation of three hopper bottom bins with a storage capacity of 3,000 bushels each, a 65 foot fill conveyor, a weigh hopper, a reclaim conveyor, and a seed blender. 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.

NOV - 4 2013

EFFECTIVE DATE

A handwritten signature in black ink, appearing to read "Kyma L. Moore".
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 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 start up 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.	2013-09-018

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."

West Central Agri Service - Centerview
Johnson County, S36, T46N, R27W

1. PM₁₀ Emission Limitation
 - A. West Central Agri Service - Centerview shall emit less than 15.0 tons of PM₁₀ in any consecutive 12-month period from the entire installation as shown in Table 1.

Table 1: Emission Units

Emission Unit	Description	Bottlenecked MHDR (tons)
EU-01	Grain Receiving	225.0
EU-02	Grain Handling	225.0
EU-04	Grain Shipping (truck)	225.0
EU-08	Hammermill	4.0
EU-10	Fertilizer Receiving	45.0
EU-11	Fertilizer Handling	45.0
EU-12	Fertilizer Loadout	45.0
EU-13	Haul Roads	6.69 VMT
EU-14	Grain Storage	36.0
EU-15	Feed Mill Receiving	60.0
EU-16	Feed Mill Loadout	60.0
EU-17	Fertilizer Mixing	45.0
EU-18	Temporary Receiving	168.0
EU-19	Temporary Storage Filling	168.0
EU-20	Truck Loading	168.0
EU-S1	Bulk Seed Receiving	24.0
EU-S2	Seed Conveyor	24.0
EU-S3	Bulk Seed Filling	24.0
EU-S4	Seed Weigh Hopper	24.0
EU-S5	Seed Blender	24.0
EU-S6	Seed Loadout	24.0

Page No.	4
Permit No.	
Project No.	2013-09-018

SPECIAL CONDITIONS:

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

- 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. Seed Treatment Limitation
 - A. West Central Agri Service - Centerview shall limit the amount of seed treated with fungicide, herbicide, pesticide, and inoculant to less than 2,000.0 tons in any consecutive 12-month period.

 - B. Attachment B, 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. Use of Alternative Seed Treatment
 - A. When using an alternative seed treatment for the installation that is different than the material listed in the Application for Authority to Construct, West Central Agri Service - Centerview shall calculate the potential emissions of all individual HAP in the alternative material, based on the seed treatment limitation of Special Condition 2.A.

 - B. Upon request from Missouri Department of Natural Resources' personnel, West Central Agri Service - Centerview shall submit the results of the calculation required by Special Condition 3.A. to the Department of Natural Resources personnel within 30 days of request.

 - C. In cases where the potential individual HAP emissions for the alternative seed treatment is above the SMAL for any chemical, West Central Agri Service – Centerview shall submit an application for Authority to Construct to the Air Pollution Control Program.

4. Operational Requirement
West Central Agri Service - Centerview shall not operate the existing grain dryer at this installation (EP-3). In order to operate the grain dryer, West Central Agri Service - Centerview shall submit an application and receive a construction permit from the Air Pollution Control Program.

Page No.	5
Permit No.	
Project No.	2013-09-018

SPECIAL CONDITIONS:

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

5. **Operational Requirement**
West Central Agri Service - Centerview shall keep the fungicides, pesticides, inoculants, liquid fertilizers, and herbicides in sealed containers whenever the materials are not in use. West Central Agri Service - Centerview shall provide and maintain suitable, easily read, permanent markings on all of the above containers.

6. **Record Keeping and Reporting Requirements**
 - A. West Central Agri Service - Centerview shall maintain all records required by this permit for not less than five years and shall make them available immediately (excluding the records required by Special Condition 3, which allow up to 30 days) to any Missouri Department of Natural Resources' personnel upon request. These records shall include MSDS for all materials used.

 - B. West Central Agri Service - Centerview 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: 2013-09-018
Installation ID Number: 101-0015
Permit Number:

West Central Agri Service - Centerview
103 South Main Street
Centerview, MO 64019

Complete: September 12, 2013

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

Johnson County, S36, T46N, R27W

REVIEW SUMMARY

- West Central Agri Service - Centerview has applied for authority to install three hopper bottom bins with a storage capacity of 3,000 bushels each, a 65 foot fill conveyor, a weigh hopper, a reclaim conveyor, and a seed blender.
- HAP emissions are expected from the proposed seed blending equipment. HAPs of concern from this process are from the seed treatments (toluene and ethylene glycol).
- None of the New Source Performance Standards (NSPS) apply to the installation. 40 CFR Part 60 Subpart DD: *Standards of Performance for Grain Elevators* does not apply to this installation because the total storage capacity is below 2.5 million bushels. According to West Central Agri Service - Centerview, the total capacity of this facility is equal to 211,000 bushels.
- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.
- Particulate emissions from this installation will be controlled by building enclosures.
- This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM₁₀ are conditioned below the de minimis level. Potential emissions of PM are above the de minimis level but remain below the major source level.
- This installation is located in Johnson 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 for this review. No modeling standard currently exists for PM.
- Emissions testing is not required for the equipment.
- No Operating Permit is required for this installation because PM does not trigger operating permit requirements.
- Approval of this permit is recommended with special conditions.

INSTALLATION/PROJECT DESCRIPTION

West Central Agri Service - Centerview is an existing facility that will install new hopper bottom bins for seed storage. West Central Agri Service - Centerview is a minor source for construction permitting purposes. The installation has requested a voluntary limitation on PM₁₀ emissions to de minimis level of fifteen tons per year. After this project, this facility will be considered a minor source for construction permitting purposes. An operating permit is not required for this facility at this time.

West Central Agri Service - Centerview is located at 103 South Main Street, Centerview, MO 64019. The facility is in Johnson County. The facility consists of an existing grain elevator, grain dryer, dry fertilizer handling, feed storage, and the proposed seed coating operation. According to West Central Agri Service - Centerview, the grain dryer located at this facility will not be operated due to its current condition. Therefore, the potential emissions from this device were not included in this permit evaluation. If West Central Agri Service - Centerview would like to operate the grain dryer at this installation in the future, West Central Agri Service - Centerview must first submit an application and receive a construction permit from the Air Pollution Control Program as stated in Special Condition 5 of this permit.

The following construction permits have been issued to West Central Agri Service - Centerview from the Air Pollution Control Program.

Table 2: Permit History

Permit Number	Description
0177-001	Grain Handling
042005-006	Grain Storage

West Central Agri Service - Centerview has proposed to install three hopper bottom bins that have a storage capacity equal to 3,000 bushels each. In addition to the bins, the facility will install a new fill conveyor, reclaim conveyors, a weigh hopper, a seed blender, and associated loadout equipment. Bulk seed will be received, treated, stored, and shipped at this facility. The conditioned potential VOC and HAP emissions from the seed treatment application were based on a 2,000 ton 12-month rolling throughput limit

as stated in Special Condition 2.A. According to West Central Agri Service - Centerview, the amount of seed treated in a year rarely exceeds 1,000 tons. Therefore, a 12-month rolling throughput limit equal to 2,000 tons of seed treated will ensure the facility will not exceed the seed treatment limit and proves through potential emissions calculations that the facility will not exceed the de minimis level. All VOCs and HAPs contained within the seed treatment are assumed to be fugitive. Emissions of PM₁₀ for the entire facility are restricted below the de minimis level of fifteen tons per year. The seed blender is rated at 24 tons per hour which will serve as the bottleneck of the seed treatment system (EU-S5). The fertilizer mixer (EP-17) is rated at 45 tons per hour which will serve as the bottleneck of the fertilizer handling system.

EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 9.9.1 *Grain Elevators and Processes*, May 2003. Haul road emissions were calculated using AP-42, Section 13.2.2, *Unpaved Roads*, November 2006. The emission factor for fertilizer handling was obtained from the EPA website for search and retrieval of emission factors, WebFIRE. Emissions from the storage bins and weigh hopper filling were calculated using the storage bin vent emission factors for a grain elevator. Seed treatment particulate emissions were calculated using the internal handling emission factor. Seed coating material formulas and contents change from year to year in order to identify and decrease the effect of the most prevalent fungi and insects. Therefore VOC contents of seed treatments are not always located on the MSDS. West Central Agri Service - Centerview estimates that the maximum amount of seed treated in any given year is about 1,000 tons. Therefore, West Central Agri Service - Centerview has requested a voluntary limit of 2,000.0 tons of seed treated in any 12-month period as shown in Special Condition 2.A. This demonstrates that West Central Agri Service - Centerview will not exceed the 40.0 ton VOC de minimis level in any consecutive 12-month period.

VOC emissions are calculated based on a mass balance approach. The maximum application rate, VOC content, and specific gravity of all seed treatments submitted with the Application for Authority to Construct are 5 ounces per 100 pounds of seed treated, 25%, and 1.295 respectively. In order to remain conservative, the potential to emit VOC was calculated using an application rate of 10 ounces per 100 pounds of seed treated, VOC content equal to 100%, and a specific gravity equal to 1.35. Using this method, the potential to emit VOC is equal to 17.6 tons. While this method is a conservative, it demonstrates that actual VOC emissions will not exceed the de minimis level. If the application rate of seed treatment does not exceed 5 ounces per 100 pounds of seed treated, the potential to emit individual HAPs will remain below the de minimis level of 10.0 tons of HAP.

The following table provides an emissions summary for this project. Existing potential emissions were calculated for this project. Existing actual emissions were taken from the installation's 2012 EIQ. Potential emissions of the application represent the potential of the emission units associated with the installation of the seed equipment, assuming continuous operation (8760 hours per year).

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions*	Existing Actual Emissions (2012 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM	25.0	537.85	N/D	60.6	41.98
PM ₁₀	15.0	191.68	1.836	22.15	<15.0
PM _{2.5}	10.0	30.57	0.27	3.67	2.40
SO _x	40.0	1.44	N/D	N/A	N/A
NO _x	40.0	12.45	N/D	N/A	N/A
VOC	40.0	0.96	N/D	17.6	18.56
CO	100.0	7.18	N/D	N/A	N/A
GHG (CO ₂ e)	100,000	12,238	N/D	N/A	N/A
GHG (mass)	0.0 / 250.0	11,968	N/D	N/A	N/A
HAPs	10.0/25.0	0.16	N/D	8.8	8.96

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

*Existing potential emissions includes emissions from propane combustion in the grain dryer that will no longer be operated at this facility. Existing potential emissions were calculated for this project in order to ensure accuracy and do not include voluntary limits in previous permits.

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 PM₁₀ are conditioned below the de minimis level. Potential emissions of PM are above the de minimis level but remains below the major source level.

APPLICABLE REQUIREMENTS

West Central Agri Service - Centerview 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
- *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 applies to this facility but the installation is in compliance with the rule because the potential particulate emissions from the storage bins are equal to 0.6 lb/hr which is less than the allowable 38.02 lb/hr.

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.

J Luebbert
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 September 10, 2013, received September 12, 2013, designating MFA Enterprises, Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

Attachment A – PM₁₀ Compliance Worksheet

West Central Agri Service - Centerview
 Johnson County, S36, T46N, R27W
 Project Number: 2013-09-018
 Installation ID Number: 101-0015
 Permit Number: _____

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

(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)
Month	Product Received (tons)		PM ₁₀ Emission Factor (lb/ton)	Monthly PM ₁₀ Emissions (pounds)	Monthly PM ₁₀ Emissions (tons)	Previous Month's 12-Month PM ₁₀ Emissions (tons)	Monthly PM ₁₀ Emissions from Previous Year (tons)	Current 12-Month PM ₁₀ Emissions (tons)
<i>Example 08/2012</i>	<i>Grain</i>	<i>10,000</i>	<i>0.151</i>	<i>1,510</i>	<i>0.976</i>	<i>2.0</i>	<i>1.0</i>	<i>1.976</i>
	<i>Feed</i>	<i>1,000</i>	<i>0.017</i>	<i>17.0</i>				
	<i>Fertilizer</i>	<i>1,000</i>	<i>0.085</i>	<i>5.0</i>				
	<i>Seed</i>	<i>1,000</i>	<i>0.211</i>	<i>211.0</i>				
	<i>Hammermill</i>	<i>1,000</i>	<i>0.034</i>	<i>34.0</i>				
	<i>Temporary</i>	<i>1,000</i>	<i>0.120</i>	<i>120.0</i>				
	<i>Grain</i>		0.151					
	<i>Feed</i>		0.017					
	<i>Fertilizer</i>		0.085					
	<i>Seed</i>		0.211					
	<i>Hammermill</i>		0.034					
	<i>Temporary</i>		0.120					
	<i>Grain</i>		0.151					
	<i>Feed</i>		0.017					
	<i>Fertilizer</i>		0.085					
	<i>Seed</i>		0.211					
	<i>Hammermill</i>		0.034					
	<i>Temporary</i>		0.120					

- (a) Record the date
- (b) Record the amount of grain received at the grain receiving pit, amount of feed received, amount of fertilizer received, amount of seed received, amount processed by hammermill, amount received at temporary pile
- (c) Emission factor for each process
- (d) Calculate using the following equation: (d) = (b) x (c)
- (e) Calculate using the following equation: (e) = ((d)_{Grain} + (d)_{Feed} + (d)_{Fertilizer} + (d)_{Seed} + (d)_{hammermill} + (d)_{temporary}) / 2000
- (f) Record the 12-month PM₁₀ emissions from last month: (h)_{last month}
- (g) Record the emissions from this month last year
- (h) Calculate using the following equation: (h) = (e) + (f) – (g)

A 12-month rolling total less than 15.0 tons of PM₁₀ indicates compliance with Special Condition 1.A.

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	
CFR	Code of Federal Regulations	National Emissions Standards for Hazardous Air Pollutants
CO	carbon monoxide	NO_x	nitrogen oxides
CO₂	carbon dioxide	NSPS	New Source Performance Standards
CO_{2e}	carbon dioxide equivalent	NSR	New Source Review
COMS	Continuous Opacity Monitoring System	PM	particulate matter
CSR	Code of State Regulations	PM_{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
dscf	dry standard cubic feet	PM₁₀	particulate matter less than 10 microns in aerodynamic diameter
EQ	Emission Inventory Questionnaire	ppm	parts per million
EP	Emission Point	PSD	Prevention of Significant Deterioration
EPA	Environmental Protection Agency	PTE	potential to emit
EU	Emission Unit	RACT	Reasonable Available Control Technology
fps	feet per second	RAL	Risk Assessment Level
ft	feet	SCC	Source Classification Code
GACT	Generally Available Control Technology	scfm	standard cubic feet per minute
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
Safety, Environmental & Regulatory Manager
West Central Agri Service - Centerview
201 Ray Young Drive
Columbia, MO 65201

RE: New Source Review Permit - Project Number: 2013-09-018

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, 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 and 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 J Luebbert, 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:jl

Enclosures

c: Kansas City Regional Office
PAMS File: 2013-09-018

Permit Number: