

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: **082012-002** Project Number: 2012-05-096
 Installation Number: 041-0036

Parent Company: AGRIServices of Brunswick, LLC

Parent Company Address: P.O. Box 38, Brunswick, MO 65236

Installation Name: AGRIServices of Brunswick, LLC - Mendon

Installation Address: 1 Brunswick, Mendon, MO 64660

Location Information: Chariton County, S10, T55N, R20W

Application for Authority to Construct was made for:
 Construction of one 152,000 bushel corrugated steel bin, two overhead load-out bins, receiving pit and 10,000 bushel per hour elevator with the installation of all associated receiving and reclaim equipment. 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.

AUG 01 2012

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.

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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."

AGRIServices of Brunswick, LLC - Mendon
Chariton County, S10, T55N, R20W

1. Particulate matter less than 10 microns in diameter (PM₁₀) Emission Limitation
 - A. AGRIServices of Brunswick, LLC - Mendon shall emit less than 15.0 tons of PM₁₀ in any consecutive 12-month period from the entire installation (see Table 1)/emission points listed below.

Table 1: List of Equipment for the Installation

Emission Unit	Equipment Description	Maximum Hourly Design Rate (tons per hour)
EP1	Grain Receiving	300
EP2	Bucket Elevator, Reclaim Augers, Grain Handling	300
EP3	Bin loading and storage (5 Bins)	300
EP5	Shipping Truck	300
EP6	Haul Road	2.4 VMT ¹

¹Vehicular miles travelled

- 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. AGRIServices of Brunswick, LLC - Mendon 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. These records shall include Material Safety Data Sheets (MSDS) for all materials used.
 - B. AGRIServices of Brunswick, LLC - Mendon shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 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 (6) REVIEW

Project Number: 2012-05-096
Installation ID Number: 041-0036
Permit Number:

AGRIServices of Brunswick, LLC - Mendon
1 Brunswick
Mendon, MO 64660

Complete: May 25, 2012

Parent Company:
AGRIServices of Brunswick, LLC
P.O. Box 38
Brunswick, MO 65236

Chariton County, S10, T55N, R20W

REVIEW SUMMARY

- AGRIServices of Brunswick, LLC - Mendon has applied for authority to construct of one 152,000 bushel corrugated steel bin, two overhead load-out bins, receiving pit and 10,000 bushel per hour elevator with the installation of all associated receiving and reclaim equipment.
- Hazardous Air Pollutant (HAP) emissions are not expected from the proposed equipment.
- None of the New Source Performance Standards (NSPS) apply to the installation.
- 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 (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM₁₀ are conditioned below de minimis levels, and conditioned particulate matter (PM) remains above de minimis level but below major source levels.
- This installation is located in Chariton 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 PM₁₀ and PM_{2.5} emissions of the application are conditioned below the de minimis level. There is no ambient air standard for PM.
- Emissions testing are not required for the equipment.
- No Operating Permit is required for this installation.

INSTALLATION/PROJECT DESCRIPTION

AGRIServices of Brunswick LLC – Mendon is a grain storage facility located in Chariton County. This project is being constructed at a previously grand-fathered facility (constructed prior to May 13, 1982). The application is for the replacement of the existing receiving system with a new 10,000 bushel per hour (300 tons per hour) receiving pit (EP1) and bucket elevator (EP2). There are three bolted steel bins and a feed mill that are being removed for this project. Four existing bins (EP3) will remain at the facility:

- 44,000 bushel (48 foot diameter)
- 44,000 bushel (33 foot diameter)
- 25,000 bushel (27 foot diameter)
- 25,000 bushel (27 foot diameter)

There will be the addition of a new 152,000 bushel corrugated steel storage bin (60 foot diameter) (EP3) with a fill pipe and reclaim auger back to the new bucket elevator (EP2). There will also be new piping to the existing bins along with overhead augers for filling the eastern most bins. All of the existing system is currently rated at about 5,000 bushels per hour (150 tons per hour), so the capacity will double.

The existing licensed grain storage capacity according to the Missouri Department of Agriculture licensed grain dealer/warehouse database was not listed but the information provided by AGRIServices of Brunswick LLC – Mendon verified that the current licensed storage capacity is 312,000 bushels; therefore it will be less than 2.5 million bushels. Therefore the installation is not defined as a grain terminal elevator under NSPS Subpart DD. The installation does not include a wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant. Therefore the installation is not defined as a grain storage elevator under NSPS Subpart DD.

AGRIServices of Brunswick LLC – Mendon has requested a 15 tons per year limit of PM₁₀ for the entire facility. No operating permit will be required.

No permits have been issued to AGRIServices of Brunswick, LLC - Mendon from the Air Pollution Control Program.

The receiving pit (EP1) determines the MHDR (300 tons per hour) for the entire installation.

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 9.9.1 *Grain Elevators and Processes*, May 2003. Haul road emissions were calculated using AP-42, Section 13.2.2, *Unpaved Roads*, November 2006.

Grain will be received by a combination of straight and hopper trucks. The receiving pit (EP1) emissions were calculated using the most conservative scenario of 100 percent delivery by straight trucks. This method avoids a special condition and record keeping for each truck type.

There is no grain dryer at this installation.

The following table provides an emissions summary for this project.

- Existing potential emissions have not been calculated prior to this permit application.
- Existing actual emissions were not available for the installation because AGRIServices of Brunswick LLC – Mendon has not submitted an Emission Inventory Questionnaire (EIQ).
- Potential emissions of the application represent the potential of the new equipment and therefore the entire installation, assuming continuous operation (8760 hours per year).

There are no control devices on any of the equipment and no controls for haul roads.

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	¹ Existing Actual Emissions (2011 EIQ)	Potential Emissions of the Application/ Installation	New Installation Conditioned Potential
PM	25.0	N/D	N/D	361.53	42.75
PM ₁₀	15.0	N/D	N/D	126.89	<15.0
PM _{2.5}	10.0	N/D	N/D	19.77	2.34
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

¹AGRIService of Brunswick, LLC – Mendon has never submitted an EIQ

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 de minimis levels, and conditioned particulate matter (PM) remains above de minimis level but below major source levels.

APPLICABLE REQUIREMENTS

AGRIServices of Brunswick, LLC - Mendon 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
- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400. Storage bin vents potential emission rate of 7.5 pounds per hour of PM complies with this regulation.

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.

Kathy Kolb
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated May 24, 2012, received May 25, 2012, designating AGRIServices of Brunswick, LLC as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

Mr. Alan Mahoney
SER Manager
AGRIServices of Brunswick, LLC - Mendon
201 Ray Young Drive
Columbia, MO 65201-3599

RE: New Source Review Permit - Project Number: 2012-05-096

Dear Mr. Mahoney:

Enclosed with this letter is your permit to construct. Please study it carefully. 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 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 Kathy Kolb, 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:kk1

Enclosures

c: Northeast Regional Office
PAMS File: 2012-05-096

Permit Number: