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: 05 2007 - 012 Project Number: 2007-04-014

Parent Company: AGRI Services of Brunswick, LLC.

Parent Company Address: Highway 24 West, Brunswick, MO 65236

Installation Name: AGRI Services of Brunswick, LLC.

Installation Address: P.O. Box 38, Brunswick, MO 65236

Location Information: Carroll County, S18, T53N, R20W

Application for Authority to Construct was made for:
Replacement of the existing grain drying system with a new one. The new dryer has an in-line burner rated at 44,582,000 BTU per hour and a maximum hourly design rate of 168 tons per hour of grain. 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.

MAY 29 2007

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 start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located with 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.
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: Project Number: 2007-04-014

Parent Company: AGRIServices of Brunswick, LLC.

Parent Company Address: Highway 24 West, Brunswick, MO 65236

Installation Name: AGRIServices of Brunswick, LLC.

Installation Address: P.O. Box 38, Brunswick, MO 65236

Location Information: Carroll County, S18, T53N, R20W

Application for Authority to Construct was made for: Replacement of the existing grain drying system with a new one. The new dryer has an in-line burner rated at 44,582,000 BTU per hour and a maximum hourly design rate of 168 tons per hour of grain. 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.

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 devises 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 this (these) air contaminant sources(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located with 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 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.
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.
Carroll County, S18, T53N, R20W

1. PM$_{10}$ Emission Limitation
   A. AGRIServices of Brunswick, LLC. shall emit less than 15 tons of particulate matter less than ten (10) microns in diameter (PM$_{10}$) in any consecutive 12 month period from the grain dryer (EP-4a and EP-4b).
   
   B. AGRIServices of Brunswick, LLC. shall maintain an accurate record of PM$_{10}$ emitted into the atmosphere from the entire installation. Attachment A or an equivalent form approved by the Air Pollution Control Program shall be used for this purpose. AGRIServices of Brunswick 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.
   
   C. AGRIServices of Brunswick, LLC. shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 1.B indicate that the source exceeds the limitation of Special Condition Number 1.A.

2. Nitrogen Oxide (NO$_x$) Emission Limitation
   A. AGRIServices of Brunswick, LLC. shall emit less than 40 tons of NO$_x$ in any consecutive 12 month period from the entire installation.
   
   B. AGRIServices of Brunswick, LLC. shall maintain an accurate record of NO$_x$ emitted into the atmosphere from the entire installation. Attachment B or an equivalent form approved by the Air Pollution Control Program shall be used for this purpose. AGRIServices of Brunswick, LLC. 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.
SPECIAL CONDITIONS:

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

C. **AGRIServices of Brunswick, LLC.** shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 2.B indicate that the source exceeds the limitation of Special Condition Number 2.A.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW
Project Number: 2007-04-014
Installation ID Number: 033-0013
Permit Number:

AGRIServices of Brunswick, LLC. Complete: 04/02/2007
P.O. Box 38 Reviewed: 04/27/2007
Brunswick, MO 65236

Parent Company:
AGRIServices of Brunswick, LLC.
Highway 24 West
Brunswick, MO 65236

Carroll County, S18, T53N, R20W

REVIEW SUMMARY

• AGRIServices of Brunswick, LLC. has applied for authority for replacement of the existing grain drying system with a new one. The new dryer has an in-line burner rated at 44,582,000 BTU per hour.

• Hazardous Air Pollutant (HAP) emissions are not expected from the proposed equipment.

• None of the New Source Performance Standards (NSPS) apply to the proposed equipment. Subpart DD of the New Source Performance Standards (NSPS), Standards of Performance for Grain Elevators, does not apply to this installation since the storage capacity of the installation is less than 2.5 million bushels of grain.

• None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (MACT) regulations applies 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 PM_{10} and NO_{x} are conditioned to below de minimis levels.

• This installation is located in Carroll County, an attainment area for all criteria air pollutants.
• This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].

• Ambient air quality modeling was not performed since potential emissions of the application are conditioned below de minimis levels.

• Emissions testing is not required for the equipment.

• An Intermediate Operating Permit is required for this installation within 30 days of equipment startup.

• Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

AGRIServices of Brunswick, LLC, formerly Brunswick River Terminal, Inc., operates a grain and fertilizer processing plant located four (4) miles west of Brunswick, Missouri on Highway 24. An Intermediate Operating Permit No. OP2006-032 for this installation was received by the Air Pollution Control Program on November 18, 2002. The following construction permits have been issued to AGRIServices of Brunswick, LLC. from the Air Pollution Control Program.

Table 1. Previously issued construction permits.

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1086-002</td>
<td>Addition of a 430,000 bushels (bu.) capacity grain storage bin with loading and unloading conveyors and a column-type dryer</td>
</tr>
<tr>
<td>1086-003</td>
<td>Installation of a 1,900,000-bu. capacity grain storage building and a 10,000 bu/hr loading conveyor</td>
</tr>
<tr>
<td>082002-008</td>
<td>Installation of an additional storage structure for corn at the existing grain and fertilizer plant</td>
</tr>
</tbody>
</table>

PROJECT DESCRIPTION

This project consists of the replacement of the current grain drying system with a new one. The existing grain dryer is capable of removing 5 points of moisture from 2,150 bushels per hour.

The new dryer is a Zimmerman Model Z-4036 that is 18 feet in diameter and 96 feet tall and has a maximum hourly design rate (MHDR) of 168 tons per hour (approx. 5,800 bushels) of grain. It has a Maxon in-line burner rated at 44,582,000 BTU per hour that will be fired with propane gas. The emission point for the grain dryer will be designated as EP-4a and that for emissions resulting from combustion of fuel as EP-4b.

A new wet bucket elevator and a dry bucket elevator will also be installed to fill the dryer and reclaim product from the dryer along with fill and reclaim conveyors and piping. The conveying equipment is totally enclosed and will not be designated as an emission source. AGRIServices of Brunswick, LLC. does not anticipate an increase in throughput as a result of the new dryer system.
No control devices will be used to control emissions from the dryer.

EMISSIONS/CONTROLS EVALUATION

The emission factors 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* (03/2003) and Section 1.5, *Liquefied Petroleum Gas Combustion* (10/1996). Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year). Existing actual emissions were taken from the installation’s 2005 Emission Inventory Questionnaire (EIQ) submittal. Table 1 provides an emissions summary for this project.

Table 2. Emissions Summary (tons per year)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>N/D</td>
<td>14.61</td>
<td>41.75</td>
<td>&lt;15.0</td>
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<tr>
<td>SO$_x$</td>
<td>40.0</td>
<td>N/D</td>
<td>0.00</td>
<td>0.21</td>
<td>N/A</td>
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<tr>
<td>NO$_x$</td>
<td>40.0</td>
<td>N/D</td>
<td>0.48</td>
<td>40.55</td>
<td>&lt;40.00</td>
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<td>VOC</td>
<td>40.0</td>
<td>N/D</td>
<td>0.01</td>
<td>1.07</td>
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<tr>
<td>CO</td>
<td>100.0</td>
<td>N/D</td>
<td>0.08</td>
<td>6.83</td>
<td>N/A</td>
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<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>N/D</td>
<td>0.00</td>
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<td>N/A</td>
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</table>

*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$_{10}$ and NO$_x$ are conditioned below de minimis levels.

APPLICABLE REQUIREMENTS

AGRIServices of Brunswick 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
  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.

- *Operating Permits*, 10 CSR 10-6.065
• 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

• Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating, 10 CSR 10-3.060

AMBIENT AIR QUALITY IMPACT ANALYSIS

Ambient air quality modeling was not performed since potential emissions of the application are conditioned below de minimis levels.
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 special conditions.

Maurice Chemweno
Environmental Engineer

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated March 30, 2007, received April 02, 2007, designating AGRIServices of Brunswick as the owner and operator of the installation.


This sheet covers the period from ___________ to ___________.

Copy this sheet as needed

<table>
<thead>
<tr>
<th>Month</th>
<th>Grain to Dryer (tons)</th>
<th>Composite Emission Factor(^1) (lbs/ton)</th>
<th>PM(_{10}) Emission (tons)</th>
<th>12-Month PM(_{10}) Emissions(^2) (Tons)</th>
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<tbody>
<tr>
<td></td>
<td>(A)</td>
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<td>(C = \frac{A \times B}{2000})</td>
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<tr>
<td></td>
<td>0.0567</td>
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\(^1\) Composite PM\(_{10}\) emission factor derived by dividing potential emissions (pounds/hr) by maximum hourly design rate (tons/hr)

\(^2\) Sum of last 12-months of Column D*

* A 12-Month Total PM\(_{10}\) emissions of less than 15 tons for Column D indicates compliance.
This sheet covers the period from ________ to ________.

<table>
<thead>
<tr>
<th>Month</th>
<th>Column 1 (a)</th>
<th>Column 2 (b)</th>
<th>Column 3 (c)</th>
<th>Column 4 (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monthly Amount of Propane Fuel Burned (1000 gal)</td>
<td>NO\textsubscript{x} Emission Factor (lb/10\textsuperscript{3} gal)</td>
<td>Monthly NO\textsubscript{x} Emissions (Tons)</td>
<td>12-Month NO\textsubscript{x} Emissions (Tons/Year)</td>
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</table>

(a) Total amount of Propane fuel burned.
(c) Column 1 x Column 2 x 0.0005.
(d) Sum of last 12-months of Column 3.

A 12-Month total NO\textsubscript{x} emissions less than 40.0 tons for Column 4 indicates compliance.
Mr. William Jackson  
General Manager  
AGRI Services of Brunswick  
P.O. Box 38  
Brunswick, MO 65236

RE: New Source Review Permit - Project Number: 2007-04-014

Dear Mr. Jackson:

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 revised 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 contact Maurice Chemweno or me at (573) 751-4817 or write the Department of Natural Resources’ Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Thank you for your time and consideration.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale  
New Source Review Unit Chief  

KBH: mcl

Enclosures

c: Northeast Regional Office  
PAMS File 2007-04-014

Permit Number: