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: 122009-010
Project Number: 2009-06-051

Parent Company: Cooperative Association #2
Parent Company Address: Depot Street, Marthasville, MO 63357
Installation Name: Cooperative Association #2
Installation Address: Depot Street, Marthasville, MO 63357
Location Information: Warren County, S30, T45N, R1W

Application for Authority to Construct was made for:

The permitting of an existing grain handling and storage facility. The installation was constructed prior to receipt of a permit from the Department of Natural Resources. This permit is part of a remedial action required by the Air Pollution Control Program. 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.

EFFECTIVE DATE

DEC 17 2009

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 departments’ 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 within 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.”

Cooperative Association #2
Warren County, S30, T45N, R1W

1. Emission Limitation – Particulate Matter Less Than Ten (10) Microns in Diameter (PM$_{10}$)
   
   A. Cooperative Association #2 shall emit less than 15.0 tons of PM$_{10}$ in any consecutive 12 month period from the grain handling and storage facility.

   B. Cooperative Association #2 shall maintain an accurate record of PM$_{10}$ emitted into the atmosphere from the entire installation. Attachment A or an equivalent form shall be used for this purpose. Cooperative Association #2 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. Cooperative Association #2 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.
Cooperative Association #2
Depot Street
Marthasville, MO 63357

Parent Company:
Cooperative Association #2
Depot Street
Marthasville, MO 63357

Warren County, S30, T45N, R1W

REVIEW SUMMARY

- Cooperative Association #2 has applied to permit an existing grain handling and storage facility.

- 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 NSPS does not apply to the installation because the installation does not meet the storage capacity requirements of the subpart.

- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or 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. Conditioned potential emissions of particulate matter (PM) are above its de minimis level but below its major level. Potential emissions of particulate matter less than ten microns (PM$_{10}$) are conditioned to below its de minimis level.

- This installation is located in Warren 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 for PM$_{10}$ because potential emissions of PM$_{10}$ are conditioned to below its de minimis level. Ambient air quality modeling was not performed for PM even though conditioned PM emissions are above the de minimis level because there is currently no Ambient Air Quality Standard for PM.

• Emissions testing is not required for the equipment.

• An application to modify the facility’s basic operating permit is required within 30 days after the issuance of this permit.

• Approval of this permit is recommended with special conditions.

INSTALLATION AND PROJECT DESCRIPTION

Cooperative Association #2 has been operating a grain storage facility that was constructed prior to receipt of a construction permit from the Air Pollution Control Program. This project is part of a remedial action required by the Air Pollution Control Program. The grain storage facility consists of three elevators and five (5) storage bins. Grain is received from straight trucks (EP-6), handled through the elevator systems (EP-7), stored in storage bins (EP-8) and shipped out on trucks (EP-9). The maximum hourly design rate of the facility is 42 tons per hour and the maximum storage capacity is 235,000 bushels. No control devices are used to control emissions from the facility.

There is a fertilizer storage and handling facility at the same site. The fertilizer facility and the grain facility should be considered part of the same installation. The fertilizer facility was issued a minor source section (5) permit in 2002 (Permit no. 032002-005). This installation is still expected to be a minor source for construction permits if the emissions from the grain facility are considered.

The installation had a basic operating permit issued to it in 2006, but this only took into account the fertilizer handling facility. The addition of emissions from the grain handling facility should not change its operating permit status. After the issuance of this permit, the installation shall submit a request to the operating permit unit of the Air Pollution Control Program to modify its basic operating permit to include the grain storage facility. No other construction or operating permits have been issued to the installation.

EMISSIONS/CONTROLS EVALUATION

Emissions from the grain receiving, grain handling, storage bins and truck shipping processes were calculated using emission factors from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Chapter 9.9.1, *Grain Elevators and Processes* (5/03). Emissions from the vehicular traffic on the haul roads were calculated using the unpaved haul road equations from AP-42, Chapter 13.2.2., *Unpaved Roads* (11/06).
The maximum hourly design rate of 42 tons per hour was calculated assuming that the process bottleneck occurs at grain receiving. It takes approximately 15 minutes to weigh each truck and complete paperwork. This allows for 4 trucks at 350 bushels per truck per hour, which adds up to 1400 bushels (42 tons) per hour assuming a bushel weight of 60 pounds per bushel.

Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year.) The following table provides an emissions summary for this project.

Table 1: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>25.0</td>
<td>N/D</td>
<td>N/D</td>
<td>67.51</td>
<td>41.52</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>15.0</td>
<td>0.08</td>
<td>24.39</td>
<td>&lt;15.00</td>
</tr>
<tr>
<td>SOx</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NOx</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

N/A = Not Applicable; N/D = Not Determined
Note 1: Only includes emissions from the fertilizer handling facility and based on conditioned potential.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Conditioned potential emissions of PM are above its de minimis level but below its major level. PM$_{10}$ emissions are conditioned to below its de minimis level.

APPLICABLE REQUIREMENTS

Cooperative Association #2 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

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.

____________________________  ________________________________
Chia-Wei Young               Date
Environmental Engineer

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated 6/16/2009, received 6/18/2009, designating Cooperative Association #2 as the owner and operator of the installation.


- St. Louis Regional Office Site Survey, dated 7/7/2009.
## Attachment A - PM$_{10}$ Compliance Worksheet

Cooperative Association #2  
Warren County, S30, T45N, R1W  
Project Number: 2009-06-051  
Installation ID Number: 219-0045  
Permit Number: ________

This sheet covers the period from _______ to _______.

<table>
<thead>
<tr>
<th>Months</th>
<th>Grain Received This Month (tons)</th>
<th>Emission Factor (lbs/ton)</th>
<th>¹Emissions this Month (lbs)</th>
<th>²Emissions this Month (tons)</th>
<th>³Emissions in the Past 12 Months (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example Jan.</td>
<td>20,000</td>
<td>0.1326</td>
<td>2652.4</td>
<td>1.33</td>
<td>1.33</td>
</tr>
<tr>
<td>Example Feb.</td>
<td>13,000</td>
<td>0.1326</td>
<td>1724.0</td>
<td>0.86</td>
<td>2.19</td>
</tr>
</tbody>
</table>

Note 1: Emissions (lbs) this Month calculated by multiplying the Grain Received this Month (tons) by the Emission Factor (lbs/ton)  
Note 2: Emissions this Month (tons) calculated by dividing Emissions this Month (lbs) by 2,000  
Note 3: Emissions in the Past 12-Months (tons) calculated by summing the Emissions this Month (tons) of the previous 12 Months. A value of less than **15.0 tons** indicates compliance.
Mr. Bill Homeyer  
General Manager  
Cooperative Association #2  
P.O. Box 262  
Washington, MO 63090  

RE: New Source Review Permit - Project Number: 2009-06-051  

Dear Mr. Homeyer:  

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. 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. 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.  

If you have any questions regarding this permit, please do not hesitate to contact Chia-Wei Young, at the Departments’ 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  

Kendall B. Hale  
New Source Review Unit Chief  

KBH: cwyl  

Enclosures  

c: St. Louis Regional Office  
PAMS File: 2009-06-051  

Permit Number: