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: 052009-001 Project Number: 2008-09-073

Parent Company: United Agri Products (UAP)

Parent Company Address: 1673 US Hwy 61 N, Portageville, MO 63873

Installation Name: Liquid and Dry Fertilizer Storage Complex

Installation Address: 701 T Port, Marston, MO 63866

Location Information: New Madrid County, S20, T22N, R14E

Application for Authority to Construct was made for: Liquid and dry fertilizer storage facility. 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 - 4 2009

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 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.”

Liquid and Dry Fertilizer Storage Complex
New Madrid County, S20, T22N, R14E
1. Emission Limitation
   A. Liquid and Dry Fertilizer Storage Complex shall emit less than 15.0 tons of particulate matter less than ten (10) microns in diameter (PM10) in any consecutive 12 month period from the entire installation. For the purposes of this special condition, entire installation encompasses all equipment at the installation at the time this permit’s issuance.

   B. Liquid and Dry Fertilizer Storage Complex shall maintain an accurate record of PM10 emitted into the atmosphere from the entire installation. Attachment A or an equivalent form shall be used for this purpose. Liquid and Dry Fertilizer Storage Complex 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. Liquid and Dry Fertilizer Storage Complex 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 1B indicate that the source exceeds the limitation of Special Condition 1A.

2. Choke feed
   A. Liquid and Dry Fertilizer Storage Complex shall control emissions from the barge receiving (EP-01) and from truck & rail receiving (EP-02) using choke feed as specified in the permit application and must be in use at all times when this plant is in operation and shall be operated and maintained in accordance with the manufacturer's specifications.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW
Project Number: 2008-09-073
Installation ID Number: 143-0077
Permit Number:

Liquid and Dry Fertilizer Storage Complex Complete: February 09, 2009
701 T Port
Marston, MO 63866

Parent Company:
United Agri Products (UAP)
1673 US Hwy 61 N
Portageville, MO 63873

New Madrid County, S20, T22N, R14E

REVIEW SUMMARY

- Liquid and Dry Fertilizer Storage Complex has applied for authority to install a liquid and dry fertilizer 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.

- 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.

- Choke feed are being used to control the particulate matter less than ten (10) microns in diameter (PM_{10}) emissions from the dry fertilizer transferring process.

- 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} are conditioned to below de minimis levels.

- This installation is located in New Madrid 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 to below de minimis levels.

• Emissions testing is not required for the equipment.

• No Operating Permit is required for this installation.

• Approval of this permit is recommended with special conditions.

INSTALLATION/PROJECT DESCRIPTION

This is a new installation and no permits have been issued to Liquid & Dry Fertilizer Storage from the Air Pollution Control Program.

Liquid & Dry Fertilizer Storage has voluntarily accepted a limit of less than 15.0 tons per year of PM$_{10}$. With this limitation, the installation will not be required to submit an operating permit application and will not need to perform an ambient air quality modeling.

The proposed project is a liquid and dry fertilizer storage facility. Product is transported to the site via barges, railcars, and trucks. A series of bucket legs and conveyors carry the product into the building where it is stored in bulk on concrete slab with concrete/timber dividing walls. Front end loaders transport the product from the storage bins, across the alleyway, to the loadout hopper. The product is carried via conveyor and bucket leg into the loadout tower, where it is blended (optional) and dispensed into the trucks. Liquid fertilizer is received via barge and train, and is pumped to one of three storage tanks; two 1,500,000 gallon or one 500,000 gallon. These storage tanks are double walled tanks for containment. The product is loaded into trucks by pumping product from storage tanks to the loadout.

Calculations were based on the assumption that the maximum Hourly Design Rate (MHDR) of the equipment associated with this installation is 250 tons of fertilizer due to the maximum hourly design rate of the mixer of 250 tons per hour. Choke feed is being used to control PM$_{10}$ emissions from the dry fertilizer transferring process.

The installation will be using electrical power from utilities for operating the equipment.

EMISSIONS/CONTROLS EVALUATION

PM$_{10}$ is the main air pollutant of concern for this project. PM$_{10}$ emissions will be emitted from the fertilizer handling, blending and load in and load out operations. Fugitive PM$_{10}$ emissions will also be emitted from vehicular traffic on the unpaved haul roads.

The emission factor 0.02 pounds per ton was used for the fertilizer handling, blending and load in and load out operations.
The unpaved haul road emission factor was calculated from information obtained from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors, fifth Edition, 13.2.2, Unpaved Roads* (9/98).

Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8,760 hours per year.) The following table provides an emissions summary for this project.

**Table 1: Emissions Summary (tons per year)**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Regulatory De Minimis Levels</th>
<th>Existing Potential Emissions</th>
<th>Existing Actual Emissions (EIQ)</th>
<th>Potential Emissions of the Application</th>
<th>New Installation Conditioned Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM\textsubscript{10}</td>
<td>15.0</td>
<td>N/A</td>
<td>N/A</td>
<td>156.13</td>
<td>&lt; 15.0</td>
</tr>
<tr>
<td>SO\textsubscript{x}</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NO\textsubscript{x}</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>VOC</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>CO</td>
<td>100.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<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

**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\textsubscript{10} were limited by the conditions of this permit to below de minimis levels.

**APPLICABLE REQUIREMENTS**

Liquid and Dry Fertilizer Storage Complex 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
  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.

- *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

AMBIENT AIR QUALITY IMPACT ANALYSIS

Ambient air quality modeling was not performed since potential emissions of the application were limited to 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.

Samer Al-Shoukhi
Environmental Engineer

PERMIT DOCUMENTS
The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated September 25, 2008, received September 9, 2008, designating United Agri Products (UAP) as the owner and operator of the installation.
Attachment A - PM$_{10}$ Compliance Worksheet

Liquid and Dry Fertilizer Storage Complex
New Madrid County, S20, T22N, R14E
Project Number: 2008-09-073
Installation ID Number: 143-0077
Permit Number: ________

This sheet covers the period from _________ to _________.

<table>
<thead>
<tr>
<th>Month</th>
<th>Monthly Amount of Fertilizer (tons)</th>
<th>Composite PM$_{10}$ Emission Factor (lbs/ton)</th>
<th>$^1$Monthly PM$_{10}$ Emissions (lbs)</th>
<th>$^2$Monthly PM$_{10}$ Emissions (tons)</th>
<th>$^3$12-Month PM$_{10}$ Emissions (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>5000</td>
<td>0.1728</td>
<td>864.0</td>
<td>0.432</td>
<td>0.432</td>
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<tr>
<td>Example</td>
<td>6000</td>
<td>0.1728</td>
<td>1036.8</td>
<td>0.5184</td>
<td>0.9504</td>
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Note 1: The Monthly Emissions (lbs) are calculated by multiplying the Monthly Production (tons) by the Composite Emission Factor (lbs/ton).

Note 2: The Monthly Emissions (tons) are calculated by dividing the Monthly Emissions (lbs) by 2,000.

Note 3: The 12-Month Emissions (tons/year) are a rolling total calculated by adding the Month’s Emissions (tons) to the Monthly Emissions (tons) of the previous eleven (11) months. A total of less than 15 tons in any consecutive 12-month period indicates compliance.
Mr. Steve Martin
Area Manager
Liquid and Dry Fertilizer Storage Complex
701 T Port
Marston, MO 63866

RE: New Source Review Permit - Project Number: 2008-09-073

Dear Mr. Martin:

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 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 Samer Al-Shoukhi at the departments’ Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KBH:sak

Enclosures

c: Southeast Regional Office
PAMS File: 2008-09-073

Permit Number: