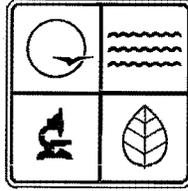


STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES  
MISSOURI AIR CONSERVATION COMMISSION



## 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: **032006-016** Project Number: **2006-01-029**

Owner: **Vanduser Gin Company Inc.**

Owner's Address: **P.O. Box 158, Vanduser, MO 63784**

Installation Name: **Vanduser Gin Company Inc.**

Installation Address: **801 Hamilton, Vanduser, MO 63748**

Location Information: **Scott County, S17, T27N, R13E**

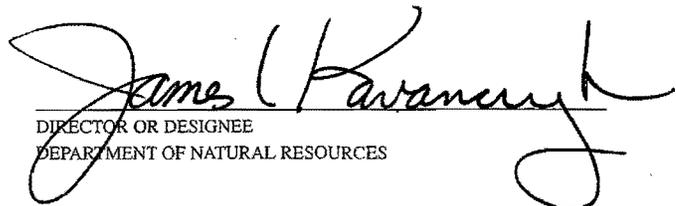
Application for Authority to Construct was made for:

**Install and replace various cotton ginning equipment. 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 (listed as attachments starting on page 2) are applicable to this permit.

MAR 21 2006

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.** Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the 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 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 as provided in RSMo 643.075. If you choose to appeal, the Air Pollution Control Program must receive your written declaration within 30 days of receipt of this permit.

If you choose not to appeal, this certificate, the project review, 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 Department of Natural Resources has established the Outreach and Assistance Center to help in completing future applications or fielding complaints about the permitting process. You are invited to contact them at 1-800-361-4827 or (573) 526-6627, or in writing addressed to Outreach and Assistance Center, P.O. Box 176, Jefferson City, MO 65102-0176.

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 Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention Construction Permit Unit.

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Permit No.	3 2006-016
Project No.	2006-01-029

### 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."*

Vanduser Gin Company Inc.  
Scott County, S17, T27N, R13E

1. **Superseding Condition**  
The conditions of this permit supersede all special conditions found in the previously issued construction permit (Permits Number 0895-011, 052001-015, and 052001-015A) from the Air Pollution Control Program.
2. **Emission Limitation**
  - A. Vanduser Gin Company Inc. shall emit less than 21.31 tons of particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>) in any consecutive 12 month period from the entire ginning installation. (Contributions to the 21.31 are from the current project (14.99 tons per year (tpy)) and from previous permitted 15,000 bales (6.32 tpy).
  - B. Vanduser Gin Company Inc. shall maintain an accurate record of PM<sub>10</sub> emitted into the atmosphere from the entire ginning installation. Attachment A or an equivalent form shall be used for this purpose. Vanduser Gin Company Inc. 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. Vanduser Gin Company Inc. shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 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 1.A.
3. **Cyclones**
  - A. The cyclones 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.
  - B. Vanduser Gin Company Inc. shall maintain an operating and maintenance log for the cyclone that shall include the following:

Page No.	3
Permit No.	<del>032006-016</del>
Project No.	2006-01-029

**SPECIAL CONDITIONS:**

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

1. Incidents of malfunction: with impact on emissions, duration of event, probable cause and corrective actions.
2. Maintenance activities: with inspection schedule, repair actions and replacements, etc.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE  
SECTION (5) REVIEW

Project Number: 2006-01-029  
Installation ID Number: 201-0071  
Permit Number: 032006-016

Vanduser Gin Company Inc.  
801 Hamilton  
Vanduser, MO 63748

Complete: January 20, 2006  
Reviewed: February 16, 2006

Parent Company:  
Vanduser Gin Company Inc.  
P.O. Box 158  
Vanduser, MO 63784

Scott County, S17, T27N, R13E

REVIEW SUMMARY

- Vanduser Gin Company Inc. has applied for authority to construct various cotton ginning equipment as described in Project Description section.
- Hazardous Air Pollutant (HAP) emissions are expected from the combustion of natural gas in negligible quantities.
- 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.
- Cyclones are being used to control the particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>) emissions from the equipment in this permit.
- 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<sub>10</sub> from the new equipment are conditioned below de minimis levels.
- This installation is located in Scott 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.
- A Basic Operating Permit application is required for this installation within 30 days of equipment startup.
- Approval of this permit is recommended with special conditions.

### INSTALLATION DESCRIPTION

Vanduser Gin Company, Inc. operates a cotton ginning operation and a fertilizer handling/storage operation in Vanduser, Missouri (Scott County). The majority of the facility was "grandfathered", however the cotton gin has had many replacement/new pieces of equipment installed. Particulate matter emissions from the cotton gin are controlled using cyclones on the exhaust. There is no record on hand regarding the fertilizer facilities. The facility is a minor source under construction permits as some of the facility is "grandfathered". The facility is considered basic state for operation permitting purposes. The following permits have been issued to Vanduser Gin Company Inc. from the Air Pollution Control Program.

Table 1: Permits issued to Vanduser Gin Company, Inc.

Permit Number	Description
0895-011	Install and replace various equipment and 15,000 bale/year limit.
052001-015	Install and replace various equipment.
052001-015A	Correct Special Conditions.

### PROJECT DESCRIPTION

Vanduser Gin Company Inc. is applying for the authority to construct/replace various ginning equipment. The equipment include the following: a 3 MMBTU natural gas dryer, a 120" Continental Eagle incline cleaner, a Continental Eagle gin stand with Super 96 Feeder, a 94" Continental Eagle lint cleaner, a Continental Eagle Airjet lint cleaner, a #60 fan, a #45-50 fan, a 36 BC fan, and one used motor control center. Equipment to be replaced includes the bale press and the 96" feed control. The existing cyclone bank was initially built for future additions and contains some unused cyclones, which will now be used. With the new addition the new maximum hourly design rate will be approximately 30 bales per hour.

### 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, Chapter 1.4 *Natural Gas Combustion* (7/98) and Chapter 9.7 *Cotton Ginning* (6/96). Existing potential emission were recalculated to incorporate updated emission factors from AP-42. The potential includes only the

ginning equipment and does not include the fertilizer facility on site. Existing actual emissions are from the 2004 Emissions Inventory Questionnaire (EIQ). 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 2: Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions*	Existing Actual Emissions (2004 EIQ)	Potential Emissions of the Application	Conditioned Potential of the Application	Installation Conditioned Potential
PM <sub>10</sub>	15.0	55.36	4.81	49.35	< 15.0	< 21.31
SO <sub>x</sub>	40.0	N/D	0.00	0.01	N/A	N/A
NO <sub>x</sub>	40.0	N/D	0.03	1.31	N/A	N/A
VOC	40.0	N/D	0.00	0.07	N/A	N/A
CO	100.0	N/D	0.03	1.10	N/A	N/A
HAPs	10.0/25.0	N/D	0.00	0.02	N/A	N/A

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

\* Existing potential emissions have not been determined since some of the facility is "grandfathered". The PM<sub>10</sub> total includes only the cotton gin using current emission factors and does not include the fertilizer portion of the facility.

The project emissions are limited to less than 15.0 tons of PM<sub>10</sub> in any consecutive 12 month period from the entire ginning installation. Record keeping will include the additional 15.0 (i.e. 14.99) tons per year plus the existing potential from the production of 15,000 bales per year, which is 6.32 tons per. The total of 21.31 tons PM<sub>10</sub> in any consecutive 12 month period from the entire ginning installation will be tracked via Attachment A using the emission factor of 0.8426 pounds PM<sub>10</sub> per bale of cotton produced. This emission factor includes the emissions from the ginning and haul road activity.

#### 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<sub>10</sub> from the new equipment are conditioned below de minimis levels.

#### APPLICABLE REQUIREMENTS

Vanduser Gin Company Inc. 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 April 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

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

## 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.

  
\_\_\_\_\_  
Michael Sanchez  
Environmental Engineer

3/20/06  
\_\_\_\_\_  
Date

## PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated January 4, 2006, received January 10, 2006, designating Vanduser Gin Company Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Southeast Regional Office Site Survey, dated January 19, 2006.



STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES



Matt Blunt, Governor • Doyle Childers, Director

www.dnr.mo.gov

MAR 21 2006

Mr. Jimmie Johnson  
Manager  
Vanduser Gin Company Inc.  
P.O. Box 158  
Vanduser, MO 63748

RE: New Source Review Permit - Project Number: 2006-01-029

Dear Mr. Johnson:

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 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 do not hesitate to contact me at (573) 751-4817, or you may write to me at the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

*Kendall B. Hale*

Kendall B. Hale  
New Source Review Unit Chief

KBH:msl

Enclosures

c: Southeast Regional Office  
PAMS File 2006-01-029  
Permit Number: 032006 - 016