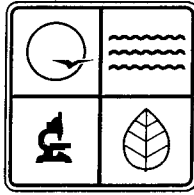


STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES  
MISSOURI AIR CONSERVATION COMMISSION



PERMIT BOOK

## 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: **052006-003** Project Number: 2006-02-063

Owner: **Stoddard County Cotton Co.**

Owner's Address: **17114 County Road 684, Bernie, MO 63822**

Installation Name: **Stoddard County Cotton Co.**

Installation Address: **17114 County Road 684, Bernie, MO 63822**

Location Information: **Stoddard County, S16, T23N, R10E**

Application for Authority to Construct was made for:

Increase bale capacity by upgrading existing and installing new 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.

**MAY - 2 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.	
Project No.	2006-02-063

**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."*

Stoddard County Cotton Co.  
Stoddard County, S16, T23N, R10E

1. Emission Limitation
  - A. Stoddard County Cotton Co. shall emit less than 15 tons of particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>) in any consecutive 12 month period from the equipment of this project. The list of equipment for this project can be found in Table 2 as denoted by \*\*.
  - B. Stoddard County Cotton Co. shall maintain an accurate record of PM<sub>10</sub> emitted into the atmosphere from the entire installation. Attachment A or an equivalent form shall be used for this purpose. Stoddard County Cotton Co. 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. Stoddard County Cotton Co. 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 1.B indicate that the source exceeds the limitation of Special Condition Number 1.A.
2. Control Device Requirement – Cyclones
  - A. Cyclones must be used to control emissions from all cotton ginning equipment at this installation. 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. Stoddard County Cotton Co. shall maintain an operating and maintenance log for the cyclone that shall include the following:
    - 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: 2006-02-063  
Installation ID Number: 207-0018  
Permit Number:

Stoddard County Cotton Co.  
17114 County Road 684  
P.O. Box 610  
Bernie, MO 63822

Complete: February 14, 2006  
Reviewed: April 12, 2006

Parent Company:  
Stoddard County Cotton Co.  
17114 County Road 684  
P.O. Box 610  
Bernie, MO 63822

Stoddard County, S16, T23N, R10E

REVIEW SUMMARY

- Stoddard County Cotton Co. has applied for authority to increase bale capacity by upgrading existing and installing new ginning equipment.
- Hazardous Air Pollutant (HAP) emissions are expected from the combustion of natural gas in insignificant amounts.
- 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 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> are conditioned to de minimis levels.
- This installation is located in Stoddard 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 de minimis levels.
- Emissions testing is not required for the equipment.
- Amendment to your 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

Stoddard County Cotton Co. is located in Bernie, Missouri. Currently the cotton ginning process consists of three gin stands, three tower dryers and associated lint cleaners. All lint cleaner emissions were uncontrolled. The maximum design rate of the entire process was 30 bales per hour.

The facility currently operates under an intermediate operating permit application received in December 2002. Stoddard County Cotton Co. is a minor source under construction permits, and the following construction permits have been issued to Stoddard County Cotton Co. from the Air Pollution Control Program.

Table 1: Issued Construction Permits

Permit Number	Description
1292-010	Installation of a cotton gin stand
0793-028	Installation of a new International mote press with incline and separator
0894-014	Installation of a new module feeding system
0995-021	Installation of a 4 MMBTU burner

### PROJECT DESCRIPTION

Stoddard County Cotton Co. has applied for the authority to construct the equipment denoted by \*\* listed in Table 2. The additions will effectively increase the maximum hourly design rate of the entire facility from 30 bales per hour to 42 bales per hour.

For existing equipment, the increase in the maximum hourly design rate (MHDR) was assumed to be 12 bales per hour, except for the gin stands. Of the three existing gin stands, only two will be replaced with new stands. To account for the increase in the MHDR, it was assumed that each of the existing gin stands had a MHDR of 10 bales per hour and each new stand had a MHDR of 16 bales per hour.

Table 2. Emission points of cotton ginning process after the project additions and the emission factors used in this determination.

Emission Point	Equipment List	MHDR (Bales/Hour)	Emission Factor (lb/bale)
*EP 1	Feed Control Module Feeder	12	0.12
EP 2	**No 1 Dryer **120" Continental Incline Cleaner **120" Stick and Green Leaf Machine Trash Fan	42	0.12
*EP 3	96" Incline Cleaner Trash Fan	12	0.093
*EP 4	96" Incline Cleaner Trash Fan	12	0.093
EP 5	**141 Continental Gin Stands	32***	0.074
*EP 6	72" Overflow System	12	0.074
EP 7	**Incline Cleaner-Mote	42	0.151
EP 8	**#1 Lint Cleaners	32***	0.24
EP 9	**#2 Lint Cleaners		
*EP 10	#3 Lint Cleaners		
EP 11	**Bale Press Battery Condenser Fan	42	0.014
EP 12	**No. 1 Dryer (Natural Gas Burner)	6 MMBTU	N/A
EP 13	Haul Roads	600 ft	N/A

Note: All emission points will be controlled using a new cyclone bank.

\* The MHDR listed for existing equipment accounts for the increase from 30 to 42 bales per hour, except where noted. Upon issuance of this permit the MHDR of the entire process will be 42 bales per hour.

\*\* New equipment being permitted which will result in a process maximum hourly design rate of 42 bales per hour, except where noted.

\*\*\*Two of the existing three gin stands will be replaced with new gin stands.

## 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 9.7, *Cotton Ginning* (6/96). Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year). Existing potential emissions were evaluated from information provided in the application. However, due to the modification of existing equipment, the existing potential was not determined. Existing actual emissions were taken from the 2005 Emissions Inventory Questionnaire (EIQ). The following table provides an emissions summary for this project.

Table 3: Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions	Existing Actual Emissions (2005 EIQ)	Potential Emissions of the Application	Application Conditioned Potential
PM <sub>10</sub>	15.0	minor	31.08	91.92	15.0
SO <sub>x</sub>	40.0	N/D	N/D	0.02	N/A
NO <sub>x</sub>	40.0	N/D	0.25	2.63	N/A
VOC	40.0	N/D	0.01	0.14	N/A
CO	100.0	N/D	0.21	2.21	N/A
HAPs	10.0/25.0	N/D	N/D	0.05	N/A

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

Emissions from the equipment of this project are limited to the de minimis amount of 15 tons of PM<sub>10</sub> per year. This limit is for the new emission points and the effective increase in bales per hour on the existing emission points (EP 1, 3, 4, 6 and 10). The contribution towards the 15 ton limit of the new emission points is 13.0 tons and the existing three emission points contribute 2.0 tons. A composite emission factor was derived from the emission factor listed in Table 2. The resulting composite emission factor is 0.5226 pounds of PM<sub>10</sub> per bale of cotton processed. This factor should be used to show compliance via Attachment A or equivalent form as required by Special Condition 1.

#### 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> are conditioned to de minimis levels.

#### APPLICABLE REQUIREMENTS

Stoddard County Cotton Co. 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

#### 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.

\_\_\_\_\_  
Emily E. Wilbur  
Environmental Engineer

\_\_\_\_\_  
Date

#### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated February 8, 2006, received February 14, 2006, designating Stoddard County Cotton Co. 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 February 27, 2006.





Ms. Jenny Below  
Office Manager  
Stoddard County Cotton Co.  
P.O. Box 610  
Bernie, MO 63822

RE: New Source Review Permit - Project Number: 2006-02-063

Dear Ms. Below:

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 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.

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  
New Source Review Unit Chief

KBH:ewl

Enclosures

c: Southeast Regional Office  
PAMS File 2006-02-063

Permit Number: