

**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: **052007-003** Project Number: 2007-03-010

Parent Company: Four Way Gin Company

Parent Company Address: North Main, P.O. Box 220, Senath, MO 63876

Installation Name: Four Way Gin Company

Installation Address: North Main, P.O. Box 220, Senath, MO 63876

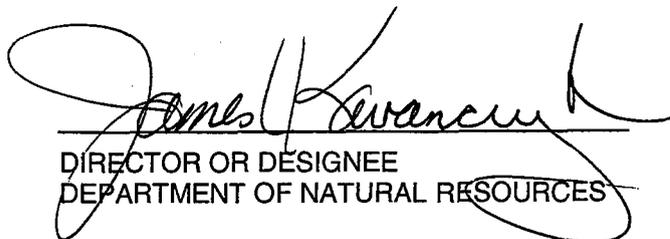
Location Information: Dunklin County, S1, T17N, R8E

Application for Authority to Construct was made for:  
The installation of a 10 bale per hour gin stand, overhead feeder and first and second stage lint cleaners. 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 7 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: 2007-03-010

Parent Company: Four Way Gin Company

Parent Company Address: North Main, P.O. Box 220, Senath, MO 63876

Installation Name: Four Way Gin Company

Installation Address: North Main, P.O. Box 220, Senath, MO 63876

Location Information: Dunklin County, S1, T17N, R8E

Application for Authority to Construct was made for:  
The installation of a 10 bale per hour gin stand, overhead feeder and first and second stage lint cleaners. 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 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.

Page No.	3
Permit No.	
Project No.	2007-03-010

## 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."*

Four Way Gin Company  
Dunklin County, S1, T17N, R8E

1. Emission Limitation
  - A. Four Way Gin Company 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 new equipment (EP-6C, EP-7C, EP-14C and EP-17) and the increase in capacity of the existing equipment.
  - B. Four Way Gin Company 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. Four Way Gin Company 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. Four Way Gin Company 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. The cyclones must be in use at all times on all high pressure exhausts when this plant is in operation and shall be operated and maintained in accordance with the manufacturer's specifications.
  - B. Four Way Gin Company shall maintain an operating and maintenance log for the cyclones 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.

Page No.	4
Permit No.	
Project No.	2007-03-010

**SPECIAL CONDITIONS:**

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

3. **Control Device Requirement – Screens**
  - A. The screens must be in use at all times on all low pressure exhausts when this plant is in operation and shall be operated and maintained in accordance with the manufacturer's specifications.
  - B. Four Way Gin Company shall maintain an operating and maintenance log for the screens 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.
  
4. **Fugitive Emission Control Requirement**
  - A. The operator(s) shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to all unpaved portions of the haul roads and vehicular activity areas (other than employee parking areas.) The suppressant will be applied in accordance with the manufacturer's suggested application rate and re-applied as necessary to maintain an adequate ground inventory to control fugitive emissions.
  - B. The operator(s) shall record the time, date and the amount of material applied for each application of the chemical dust suppressant.

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

Project Number: 2007-03-010  
Installation ID Number: 069-0027  
Permit Number:

Four Way Gin Company  
North Main  
P.O. Box 220  
Senath, MO 63876

Complete: 03/05/2007  
Reviewed: 03/23/2007

Parent Company:  
Four Way Gin Company  
North Main  
P.O. Box 220  
Senath, MO 63876

Dunklin County, S1, T17N, R8E

REVIEW SUMMARY

- Four Way Gin Company has applied for authority to install a 10 bale per hour gin stand, overhead feeder and first and second stage lint cleaners.
- 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.
- High efficiency cyclones and mesh screens 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 below de minimis levels.
- This installation is located in Dunklin 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 conditioned to de minimis levels.
- Emissions testing is not required for the equipment.
- An Intermediate 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

Four Way Gin Company is an existing source, which holds an intermediate operating permit. This permit limits Four Way Gin Company to less than 75,000 bales of cotton per year. Seed cotton is brought to the gin in large modules. A module feeder removes some large debris and separates these modules. From the module feeder, the seed cotton is pneumatically conveyed to cleaners and dryers and is then sent to a gin stand. An overhead screw auger feeds the gin stands at a controlled rate. The gin stands separate the seeds from the lint using rotation saws. The cottonseed is pneumatically conveyed to a seed house for storage. The lint is cleaned and condensed into uniform bales. Four Way Gin is permitted to process 20 bales per hour.

The following construction permits have been issued to Four Way Gin Company from the Air Pollution Control Program.

Permit Number	Description
0792-035	Tower Dryers

### PROJECT DESCRIPTION

Four Way Gin Company has applied for authority to construct a new gin stand (EP-7C), feeder (EP-6C) and first-stage (EP-14C) and second-stage (EP-17) lint cleaners. The new gin stand, feeder and first-stage lint cleaner will replace existing pieces of equipment. The new second-stage lint cleaner will serve the new gin stand. This modification will increase the gin's maximum hourly design rate to 30 bales per hour. High-pressure exhausts will be controlled with properly sized high efficiency cyclones, and low-pressure exhausts will be controlled with screens.

### 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 (June 1996.) The following table provides an emissions summary for this project.

Table 1: Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis Levels	*Existing Potential Emissions	Existing Actual Emissions (2005 EIQ)	Potential Emissions of the Application	New Project Conditioned Potential
PM <sub>10</sub>	15.0	73.68	9.06	53.53	< 15
SO <sub>x</sub>	40.0	N/D	N/D	N/A	N/A
NO <sub>x</sub>	40.0	N/D	N/D	N/A	N/A
VOC	40.0	N/D	N/D	N/A	N/A
CO	100.0	N/D	N/D	N/A	N/A
HAPs	10.0/25.0	N/D	N/D	N/A	N/A

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

\*Existing Potential Emissions are from the unconditioned-grandfathered equipment and equipment permitted in 0792-035.

The Existing Potential Emissions were recalculated using current AP-42 emission factors and assuming continuous operation. Potential Emissions of the Application represent the emissions from the new equipment and the increase in emissions from the existing equipment due to the increase in capacity.

For the purposes of record keeping, an emission factor was created for the entire installation. Emissions from this project are equal to one third of the entire installations emissions.

#### 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 below de minimis levels.

#### APPLICABLE REQUIREMENTS

Four Way Gin Company 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

- *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

#### 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 Mittermeyer  
 Environmental Engineer

\_\_\_\_\_  
 Date

#### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated 02/28/2007, received 03/05/2007, designating Four Way Gin Company 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 March 13, 2007.



Ms. Cindy Wilkins  
Manager  
Four Way Gin Company  
P.O. Box 220  
Senath, MO 63876

RE: New Source Review Permit - Project Number: 2007-03-010

Dear Ms. Wilkins:

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 Michael Mittermeyer 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. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale  
New Source Review Unit Chief

KBH:mml  
Enclosures

c: Southeast Regional Office  
PAMS File 2007-03-010  
Permit Number: