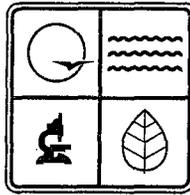


STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES

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 **032006-011**

Project Number: 2006-01-015

Owner: Chinn Feed, LLC

Owner's Address: 3937 Highway 151, Clarence, MO 63437

Installation Name: Chinn Feed Mill

Installation Address: East of Clarence North of Hwy 36, Clarence, MO 63437

Location Information: Shelby County, S16, T57N, R12W

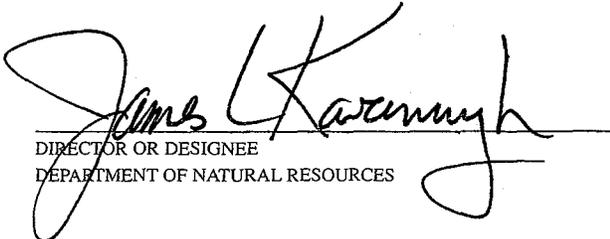
Application for Authority to Construct was made for:

Installation of a animal feed mill. 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 17 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.

Page No.	2
Permit No.	
Project No.	2006-01-015

**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."*

Chinn Feed Mill  
Shelby County, S16, T57N, R12W

1. Emission Limitation
  - A. Chinn Feed Mill 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 entire installation (emission points listed in Table 1).
  - B. Chinn Feed Mill 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. Chinn Feed Mill 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. Chinn Feed Mill 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. Odor Control and Corrective Action

If a continuing situation of demonstrated nuisance odors exists in violation of 10 CSR 10-3.090, *Restriction of Emission of Odors*, the Director may require Chinn Feed Mill to submit a corrective action plan within 30 days, adequate to timely and significantly mitigate the odors Chinn Feed Mill shall implement any such plan immediately upon its approval by the Director. Failure to either submit or implement such a plan shall be a violation of the permit.

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

Project Number: 2006-01-015  
Installation ID Number: 205-0022  
Permit Number:

Chinn Feed Mill  
East of Clarence North of Hwy 36  
Clarence, MO 63437

Complete: January 9, 2006  
Reviewed: January 27, 2006

Parent Company:  
Chinn Feed, LLC  
3937 Highway 151  
Clarence, MO 63437

Shelby County, S16, T57N, R12W

REVIEW SUMMARY

- Chinn Feed Mill has applied for authority to construct an animal feed mill in Shelby County just east of Clarence, Missouri north of highway 36.
- 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.
- No air pollution control equipment is being used in association with the new equipment.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>) are conditioned below de minimis levels.
- This installation is located in Shelby 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.
- No Operating Permit is required for this installation.
- Approval of this permit is recommended with special conditions.

## PROJECT DESCRIPTION

Chinn Feed Mill is constructing a feed mill, on a greenfield site, east of Clarence, Missouri north of highway 36 in Shelby County. The facility will consist of a 80 ft x 120 ft pre-engineered metal building, a pre-engineered steal square bin system located near the center of the metal building, two exterior 25,000 bushel steel grain bins, and a 10,000 gallon heated cone bottom tank. Inside the building is an enclosed ingredient receiving driveway (120 ft x 16 ft) with overhead doors on each end. In the center is an 11 ft x 70 ft dump through truck scale. Typical ingredients (lime, dicalcium phosphate, and salt) can be received at maximum hourly rate of 45 tons/hr. Table 1 lists the facilities emission points.

Table 1: Chinn Feed Mill emission points.

Emission Point	Emission Source
EP-1	Haul Road (Gravel)
EP-2	Grain Receiving - Hopper Truck
EP-3	Storage Bins
EP-4	Headhouse and Grain Handling
EP-5	Feed Shipping - Loadout
EP-6	Electric Heated Fat Tank (10,000 gallons)

Bulk ingredients are received and transferred via conveyors to individual bins in the square bin system (14 bins). Whole grain is received and transferred to the exterior grain storage bins and then transferred to a scalper to remove objects over one half inch diameter. The grain is discharged from scalper directly into a storage bin above the two roller mills. The two roller mills have a total hourly design rate of 53 tons (38 tons and 15 tons per hour) and grinds the grain to approximately 700 micro particle size. Ground grain then is transferred into two dedicated ground grain bins.

Major bulk feed ingredients are transferred into the major scale hopper in the required amount. Minor bulk feed ingredients are routed via round spouting to a micro weighting system. Then the minor and bulk feed ingredients are then routed to the feed mixer. Choice white grease is then added to the feed at the mixer via a pump and manifold system. The feed is then mixed and discharged to a surge bin fitted directly under the mixer. The mixed feed is transferred via conveyors to load out bins located in the

square bin system directly over the center of load out driveway (six 26 ton bins, four 13 ton bins, and one cob bin). The cob bin collects oversized material from scalper. The facility will have a maximum hourly rate of 60 tons of feed per hour (tons/hr).

All conveyors, spouting, and transitions are bolted, gasketed, or sealed to prevent dusting to the atmosphere. The major scale, mixer, and surge are inter-vented to equalize air pressure and to prevent dusting to atmosphere.

## 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 9.9.1 *Grain Elevators and Processes* (05/03) and Section 13.2.2 *Unpaved Roads* (12/03). 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	Potential Emissions of the Application	New Installation Conditioned Potential
PM <sub>10</sub>	15.0	N/A	N/A	22.97	< 15.0
SO <sub>x</sub>	40.0	N/A	N/A	0.00	N/A
NO <sub>x</sub>	40.0	N/A	N/A	0.00	N/A
VOC	40.0	N/A	N/A	0.00	N/A
CO	100.0	N/A	N/A	0.00	N/A
HAPs	10.0/25.0	N/A	N/A	0.00	N/A

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<sub>10</sub> are conditioned below de minimis levels.

## APPLICABLE REQUIREMENTS

Chinn Feed Mill 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 April 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

## 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.

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Michael Sanchez  
Environmental Engineer

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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 9, 2006, designating Chinn Feed, LLC as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Northeast Regional Office Site Survey, dated January 20, 2006.



Mr. Gary Chinn  
Manager  
Chinn Feed Mill  
3937 Highway 151  
Clarence, MO 63437

RE: New Source Review Permit - Project Number: 2006-01-015

Dear Mr. Chinn:

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 and 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 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. Thank you for your attention to this matter.

Sincerely,

**AIR POLLUTION CONTROL PROGRAM**

Kendall B. Hale  
New Source Review Unit Chief

KBH:msl

Enclosures

c: Northeast Regional Office  
PAMS File 2006-01-015

Permit Number: