

PERMIT BOOK

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: **022012-013**

Project Number: 2011-04-054
Installation Number: 195-0055

Parent Company: Weber Seeds Inc.

Parent Company Address: 29761 E. Highway 41, Marshall, MO 65340

Installation Name: Weber Seeds Inc.

Installation Address: 29761 E. Highway 41, Marshall, MO 65340

Location Information: Saline County, S8, T50N, R20W

Application for Authority to Construct was made for:

The permitting of an existing seed processing plant. This facility was constructed prior to receipt of a permit from the Missouri Department of Natural Resources. Obtaining this permit is part of a remedial action required by the Air Pollution Control Program. 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.

FEB 22 2012

EFFECTIVE DATE

Handwritten signature of Kyla L. Moore in cursive script.

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 Departments' Air Pollution Control Program of the anticipated date of start up of these air contaminant sources. The information must be made available within 30 days of actual startup. 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 these air contaminant sources.

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.

Page No.	3
Permit No.	
Project No.	2011-04-054

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."

Weber Seeds Inc.
Saline County, S8, T30N, R20W

1. Haul Road Watering
Weber Seeds Inc. shall water all haul roads whenever conditions exist which would cause visible fugitive emissions to enter the ambient air beyond the property boundary.
2. Control Requirement – Oil Dust Suppression
Weber Seeds Inc. shall control emissions from equipment downstream of the Westrup air screen cleaner (EU5) by applying mineral oil on the seeds as they are conveyed from the cleaner. The mineral oil shall be applied in accordance with the company's product specifications.
3. Control Device Requirement-Baghouse
 - A. Weber Seeds Inc. shall control emissions from the following equipment using baghouses as specified in the permit application.
 - 1) Dump pit - seed receiving to primary holding bin (EU1)
 - 2) Leg 1 to hopper bin seed receiving (EU2)
 - 3) Leg 2 to outside storage bins (EU3)
 - 4) All handling and conveying (EU4)
 - 5) Westrup air screen cleaner (EU5)
 - 6) Color sorter (EU6)
 - 7) Oliver 240 gravity table (EU7)
 - 8) Oliver 3600 gravity table (EU8)
 - B. The baghouses shall be operated and maintained in accordance with the manufacturer's specifications. The baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that the Department of Natural Resources' employees may easily observe them.

Page No.	4
Permit No.	
Project No.	2011-04-054

SPECIAL CONDITIONS:

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

- C. Weber Seeds Inc. shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours while the baghouse is in operation. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
 - D. Replacement filters for the baghouses shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
 - E. Weber Seeds Inc. shall maintain an operating and maintenance log for the baghouses which shall include the following:
 - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
4. **Record Keeping and Reporting Requirements**
Weber Seeds Inc. shall maintain all records required by this permit for not less than five years and shall make them available to any Missouri Department of Natural Resources' personnel upon request. These records shall include Material Safety Data Sheets (MSDS) for all materials used.

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

Project Number: 2011-04-054
Installation ID Number: 195-0055
Permit Number:

Weber Seeds Inc.
29761 E. Highway 41
Marshall, MO 65340

Complete: April 21, 2011

Parent Company:
Weber Seeds Inc.
29761 E. Highway 41
Marshall, MO 65340

Saline County, S8, T50N, R20W

REVIEW SUMMARY

- Weber Seeds Inc. has applied to permit an existing seed processing plant.
- Hazardous Air Pollutant (HAP) emissions are not expected from the proposed equipment.
- None of the New Source Performance Standards (NSPS) apply to the installation.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) apply to this installation. None of the currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- Oil suppression and a baghouse are being used to control the particulate 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 all pollutants are below their respective *de minimis* levels.
- This installation is located in Saline County, an attainment area for all criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.
- Ambient air quality modeling was not performed because the potential emissions of all pollutants are below their respective *de minimis* levels.

- Emissions testing is not required for the equipment.
- No operating permit is required for this installation. Emissions of all pollutants are below their respective *de minimis* levels.
- Approval of this permit is recommended with special conditions.

INSTALLATION AND PROJECT DESCRIPTION

The installation is a seed processing plant located in Marshall. The facility was constructed prior to receiving a permit from the Department of Natural Resources and this permit is part of a remedial action required by the Air Pollution Control Program. Seeds are stored in storage bins and processed through legs, conveyors, gravity tables, and a color sorter before being packaged and shipped. Cruiser Max and Apron Max fungicides are applied with a Guston RH24 commercial seed treater. The fungicides do not contain any HAPs. The facility has a maximum hourly design rate of 400 bushels (12 tons) per hour. No combustion sources will be used by the installation. Mineral oil will be applied as the seeds are conveyed out of the Westrup air screen to control particulate emissions downstream of the air screen. A baghouse is used to control particulate emissions from truck receiving, internal handling, the air screen, the color sorter and two gravity tables.

EMISSIONS/CONTROLS EVALUATION

There are currently no emission factors for seed processing plants. Therefore, emission factors for grain elevators were used instead. The emission factors for truck receiving, internal handling, storage bins, and loadout were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Chapter 9.9.1, *Grain Elevators & Process*, (5/2003). There are no known emission factors for the air screen, the color sorter and the gravity tables. Emissions from these equipment were calculated using the emission factor for an internal vibrating screen (SCC 3-02-005-37) in AP-42, Chapter 9.9.1. The emission factor for the internal vibrating screen in AP-42, Chapter 9.9.1 is based on the use of cyclones. For this review, the uncontrolled emission factors were back-calculated by dividing out a cyclone control efficiency of 80 percent (%).

According to AP-42, Chapter 9.9.1, studies have shown that control efficiency between 60 and 80 percent can be achieved for the use of oil suppression on grains. However, for this project, a control efficiency of 20 percent was used based on conservative engineering judgment because the application rate (0.33 gallons per 1,000 bushels) used by the facility is less than the rate recommended by the EPA for effective dust control (between 0.5 and 1.7 gallons per 1,000 bushels). The baghouse was given a device efficiency of 99 percent in accordance with AP-42, Appendix B.2. Table B.2-3. A 100 percent device capture efficiency was used for the baghouse at points that are fully ducted (e.g. internal handling equipment, storage bins, air screens, etc.). A 70 percent device capture efficiency was used at points that are not fully enclosed (e.g. truck receiving).

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)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions	Potential Emissions of the Application	New Installation Conditioned Potential
PM _{2.5}	10.0	N/A	N/D	0.96	N/A
PM ₁₀	15.0	N/A	N/D	7.03	N/A
PM	25.0	N/A	N/D	21.93	N/A
SO _x	40.0	N/A	N/D	N/A	N/A
NO _x	40.0	N/A	N/D	N/A	N/A
VOC	40.0	N/A	N/D	N/A	N/A
CO	100.0	N/A	N/D	N/A	N/A
HAPs	10.0/25.0	N/A	N/D	N/A	N/A

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

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 all pollutants are below their respective *de minimis* levels.

APPLICABLE REQUIREMENTS

Weber Seeds 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.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
- *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 10-6.165

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.

Chia-Wei Young
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated April 21, 2011, received April 21, 2011, designating Weber Seeds Inc. 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 May 11, 2011.

Mr. Dan Weber
President
Weber Seeds Inc.
29761 E. Highway 41
Marshall, MO 65340

RE: New Source Review Permit - Project Number: 2011-04-054

Dear Mr. Weber:

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 are necessary for 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 Chia-Wei Young, at the Department's 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

Susan Heckenkamp
New Source Review Unit Chief

SH:cyk

Enclosures

c: Northeast Regional Office
PAMS File: 2011-04-054

Permit Number: