

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: 102016-005

Project Number: 2016-07-026
Installation Number: 041-0002

Parent Company: Salisbury AG Center, Inc.

Parent Company Address: 202 East Front Street, Salisbury, MO 65281 P.O Box 141

Installation Name: Salisbury AG Center, Inc.

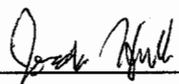
Installation Address: 301 North Weber Avenue, Salisbury, MO 65281

Location Information: Chariton County, S2, T53N, R17W

Application for Authority to Construct was made for:
New feed mill. This review was conducted in accordance with Section (6), 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.


Prepared by
Jordan Hull
New Source Review Unit


Director or Designee
Department of Natural Resources
OCT 20 2016

Effective Date

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 Enforcement and Compliance Section of 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 Enforcement and Compliance Section of 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 within 30 days of actual startup. Also, you must notify the Department's 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 the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department's 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 using the contact information below.

Contact Information:
Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176
(573) 751-4817

The regional office information can be found at the following website:
<http://dnr.mo.gov/regions/>

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."

Salisbury AG Center, Inc.
Chariton County, S2, T53N, R17W

1. **PM₁₀ Emission Limitation**
 - A. Salisbury AG Center, Inc. shall emit less than 15.0 tons of PM₁₀ in any consecutive 12-month period from the equipment shown in Table 2.
 - B. Attachment A or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 1.A.
2. **Haul Road Watering**
 - A. Salisbury AG Center, Inc. shall water haul roads and vehicular activity areas whenever conditions exist which would cause visible fugitive emissions to enter the ambient air beyond the property boundary.
 - B. Watering may be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads.
3. **Control Device Requirement – Baghouse**
 - A. Salisbury AG Center, Inc. shall control emissions from EP-3 from Table 2 using a baghouse as specified in the permit.
 - B. The baghouse shall be operated and maintained in accordance with the manufacture'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.
 - C. 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).
 - D. Salisbury AG Center, Inc. shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours of operation.

SPECIAL CONDITIONS:

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

The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.

- E. Salisbury AG Center, 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.
 - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

- 4. Operational Requirement- Enclosed Building
 - A. Salisbury AG Center, Inc shall keep all warehouse doors closed at all times except during personnel or equipment entrance or egress.

- 5. Record Keeping and Reporting Requirements
 - A. Salisbury AG Center, Inc. shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.

 - B. Salisbury AG Center, Inc. shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 days after the end of the month during which any record required by this permit shows an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (6) REVIEW

Project Number: 2016-07-026
Installation ID Number: 041-0002
Permit Number:

102016 - 005

Installation Address:
Salisbury AG Center, Inc.
301 North Weber Avenue
Salisbury, MO 65281

Parent Company:
Salisbury AG Center, Inc.
202 East Front Street P.O. Box 141
Salisbury, MO 65281

Chariton County, S2, T53N, R17W

REVIEW SUMMARY

- Salisbury AG Center, Inc. has applied for authority to install a new feed mill.
- The application was deemed complete on July 19, 2016.
- HAP emissions are not expected from the proposed equipment.
- None of the New Source Performance Standards (NSPS) apply to the installation. 40 CFR 60 Subpart DD, "Standards of Performance for Grain Elevators" does not apply to the equipment as this facility does not exceed 2.5 million bushels.
- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.
- A baghouse is being used to control the PM, PM₁₀, and PM_{2.5} emissions from the internal handling equipment in this permit and undocumented watering is being used to control PM, PM₁₀, and PM_{2.5} emissions from the haul roads.
- This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM₁₀ are conditioned below de minimis levels. PM emissions are above de minimis, but below major thresholds.
- This installation is located in Chariton 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 counted toward major source applicability.

- Ambient air quality modeling was not performed for this review since the potential PM₁₀ emissions are conditioned below de minimis levels. PM emissions were not modeled since PM does not have an associated air quality standard.
- Emissions testing is not required for the equipment as a part of this permit. Testing may be required as part of other state, federal or applicable rules.
- The new equipment included in this permit should be incorporated in the next renewal of the Basic Operating Permit due October 3, 2017.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Salisbury AG Center, Inc. plans to install a new animal feed manufacturing plant in Chariton County near Salisbury, Missouri. The facility receives grain and various other ingredients by truck to produce hog feed. The ingredients are then stored in storage bins until feed production begins. All grain received at this facility will be processed through the roller mill (EP-9) and mixer (EP-10). Finished product is shipped in bulk from the facility by truck. Salisbury AG center, Inc. has an existing feed mill permitted under 1086-006A.

Salisbury AG Center, Inc. currently has a Basic Operating Permit that expires October 3, 2017.

The following permits have been issued to Salisbury AG Center, Inc. from the Air Pollution Control Program and are shown in Table 1.

Table 1: Permit History

Permit Number	Description
1086-006	New 55,000 bushel grain bin
2002 OP	Basic Operating Permit
2007 OP	Basic Operating Permit renewal
2012 OP	Basic Operating Permit renewal

PROJECT DESCRIPTION

Salisbury AG Center, Inc. has applied to construct a hog feed manufacturing plant including all equipment mentioned in Table 2 below. The facility will be located at 202 East Front Street in Salisbury, MO. The facility will receive the grain and ingredient to produce the feed. The mixing process acts as the facility bottleneck of 25 tons per hour. After construction of the facility, Salisbury AG Center, Inc. will be capable of producing 25 tons of feed per hour. There is baghouse that is to be installed on the facility as a

control device. This Baghouse is applied to all the internal handling processes of the feed. There is one gravel haul road approximately a quarter of a mile long that services the area for shipping and receiving.

The following table lists the emission points and a description of the equipment.

Table 2: Salisbury AG Center, Inc. Project Emission Points

Emission Points	Equipment Description	SCC	MHDR (tpy)
EP 1	Dump Pit	30200552	25.0
EP 2	Storage Bins (3)	30200540	25.0
EP 3	Grain Internal Handling	30200530	25.0
EP 4	Roller Mill	30200819	25.0
EP 5	Haul Road	302011	25.0
EP 6	Truck Loadout	30200560	25.0

EMISSIONS/CONTROLS EVALUATION

The emission factors used in this analysis were obtained from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 9.9.1 *Grain Elevators and Processes*, May 2003. Grain receiving was assumed to occur through a 50/50 split of straight trucks and hopper trucks. The emission factor for the roller mill accounted for a control efficiency of a single cyclone so no control efficiency was given for the baghouse being used to control it. No other emission factors without a control device are available for a roller mill. The building is enclosed and the system is fully automated meaning that nobody enters or exits the building during operation. The doors of the building are required to be shut when the plant is in operation. The building will be constructed with a baghouse to capture PM, PM₁₀, and PM_{2.5}. A capture efficiency of 70% was applied to the building to account for opening of doors and other various fugitive emission points since the building will not be under negative pressure. PM removal efficiency of 99.5%, PM₁₀ removal efficiency of 99.5% and PM_{2.5} removal efficiency of 99% were applied to all of the internal handling equipment as the building is a fully enclosed structure with a baghouse. Haul road emissions were calculated using AP-42, Section 13.2.2, *Unpaved Roads*, November 2006. Emissions from the haul road will be controlled (50%) for PM, PM₁₀ and (22.2%) for PM_{2.5} by using undocumented watering.

The following table provides an emissions summary for this project. Existing actual emissions were taken from the installation's 2015 EIQ. Existing potential emissions were taken from previous permit #1086-006. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year).

Table 3: Emissions Summary (tpy)

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions	Existing Actual Emissions (2015 EIQ)	Potential Emissions of the Project	Project Conditioned Potential
PM	25.0	2.27	N/D	57.81	47.91
PM ₁₀	15.0	N/A	1.26	18.10	<15.0
PM _{2.5}	10.0	N/A	0.18	2.99	2.47
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
GHG (CO ₂ e)	75,000 / 100,000	N/A	N/D	N/A	N/A
GHG (mass)	0.0 / 100.0 / 250.0	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 (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM₁₀ are conditioned below de minimis levels, and indirectly conditioned particulate matter (PM) remains above de minimis level, but below major source levels.

APPLICABLE REQUIREMENTS

Salisbury AG Center, 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

- Per 10 CSR 10-6.110(4)(B)2.B(II) and (4)(B)2.C(II) a full EIQ is required for the first full calendar year the equipment (or modifications) approved by this permit are in operation.
- *Operating Permits*, 10 CSR 10-6.065
 - The new equipment included in this permit should be incorporated in the next renewal of the Basic Operating Permit due October 3, 2017.
- *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

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 (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, it is recommended that this permit be granted with special conditions.

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated July 1, 2016, received July 13, 2016, designating Salisbury AG Center, Inc. as the owner and operator of the installation.

APPENDIX A

Abbreviations and Acronyms

%	percent	m/s	meters per second
°F	degrees Fahrenheit	Mgal	1,000 gallons
acfm	actual cubic feet per minute	MW	megawatt
BACT	Best Available Control Technology	MHDR	maximum hourly design rate
BMPs	Best Management Practices	MMBtu ..	Million British thermal units
Btu	British thermal unit	MMCF	million cubic feet
CAM	Compliance Assurance Monitoring	MSDS	Material Safety Data Sheet
CAS	Chemical Abstracts Service	NAAQS ..	National Ambient Air Quality Standards
CEMS	Continuous Emission Monitor System	NESHAPs	National Emissions Standards for Hazardous Air Pollutants
CFR	Code of Federal Regulations	NO_x	nitrogen oxides
CO	carbon monoxide	NSPS	New Source Performance Standards
CO₂	carbon dioxide	NSR	New Source Review
CO₂e	carbon dioxide equivalent	PM	particulate matter
COMS	Continuous Opacity Monitoring System	PM_{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
CSR	Code of State Regulations	PM₁₀	particulate matter less than 10 microns in aerodynamic diameter
dscf	dry standard cubic feet	ppm	parts per million
EIQ	Emission Inventory Questionnaire	PSD	Prevention of Significant Deterioration
EP	Emission Point	PTE	potential to emit
EPA	Environmental Protection Agency	RACT	Reasonable Available Control Technology
EU	Emission Unit	RAL	Risk Assessment Level
fps	feet per second	SCC	Source Classification Code
ft	feet	scfm	standard cubic feet per minute
GACT	Generally Available Control Technology	SDS	Safety Data Sheet
GHG	Greenhouse Gas	SIC	Standard Industrial Classification
gpm	gallons per minute	SIP	State Implementation Plan
gr	grains	SMAL	Screening Model Action Levels
GWP	Global Warming Potential	SO_x	sulfur oxides
HAP	Hazardous Air Pollutant	SO₂	sulfur dioxide
hr	hour	tph	tons per hour
hp	horsepower	tpy	tons per year
lb	pound	VMT	vehicle miles traveled
lbs/hr	pounds per hour	VOC	Volatile Organic Compound
MACT	Maximum Achievable Control Technology		
µg/m³	micrograms per cubic meter		



Jeremiah W. (Jay) Nixon, Governor • Harry D. Bozoian, Director

DEPARTMENT OF NATURAL RESOURCES

dnr.mo.gov

OCT 20 2016

Mr. Ted Erickson
Manager
Salisbury AG Center, Inc.
301 North Weber Avenue
Salisbury, MO 65281

RE: New Source Review Permit - Project Number: 2016-07-026

Dear Mr. Erickson:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions 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.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty 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 administrative hearing commission, whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West

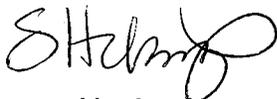
Mr. Ted Erickson
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High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: www.oa.mo.gov/ahc.

If you have any questions regarding this permit, please do not hesitate to contact Jordan Hull, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



Susan Heckenkamp
New Source Review Unit Chief

SH:jhj

Enclosures

c: Northeast Regional Office
PAMS File: 2016-07-026

Permit Number: 102016-005