



Eric R. Greitens, Governor • Carol S. Comer, Acting Director

# DEPARTMENT OF NATURAL RESOURCES

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**FEB 28 2017**

Mr. Ted Erickson  
Manager  
Salisbury AG Center, Inc.  
202 East Front Street  
Salisbury, MO 65281

RE: New Source Review Permit Amendment - Permit Number: 102016-005A  
Project Number: 2016-12-035; Installation Number: 041-0002

Dear Mr. Erickson:

The Air Pollution Control Program received your request to amend Permit # 102016-005. This Permit is being amended to remove the Baghouse Special Condition from the original permit as a bag house is now not going to be installed at the facility. This caused many minor changes throughout the permit. Please replace pages 3-10 from the original Permit (102016-005) with the attached pages to account for the changes.

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 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](http://www.oa.mo.gov/ahc).



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Mr. Erickson  
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If you have any questions regarding this amendment, please do not hesitate to contact Jordan Hull, at the department's 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**

*Kendall B. Hale*

**Kendall B. Hale**  
**Permits Section Chief**

KBH:jhj

Enclosures

c: Northeast Regional Office  
PAMS File: 2016-12-035

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Permit No.	102016-005A
Project No.	2016-12-035

**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. **PM<sub>10</sub> Emission Limitation**
  - A. Salisbury AG Center, Inc. shall emit less than 15.0 tons of PM<sub>10</sub> 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. **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.
  
4. **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: 102016-005A

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.
- This review was conducted in accordance with Section (6) 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. 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 PM<sub>10</sub> 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. No control devices are being used to capture emissions. There is one gravel haul road approximately a quarter of a mile long that services the area for shipping and receiving. The following table (Table 2) lists the emission points and a description of the equipment.

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

<b>Emission Points</b>	<b>Equipment Description</b>	<b>SCC</b>	<b>MHDR (tpy)</b>
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. No capture efficiency was given to the building as there are plans to use exhaust fans in the summer months. 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, PM<sub>10</sub> and (41%) for PM<sub>2.5</sub> 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 EIO)	Potential Emissions of the Project	Project Conditioned Potential
PM	25.0	2.27	N/D	112.4	36.9
PM <sub>10</sub>	15.0	N/A	1.26	45.66	<15.0
PM <sub>2.5</sub>	10.0	N/A	0.18	4.06	1.34
SO <sub>x</sub>	40.0	N/A	N/D	N/A	N/A
NO <sub>x</sub>	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 <sub>2</sub> 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 PM<sub>10</sub> 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.



## Attachment A – PM<sub>10</sub> Compliance Worksheet

Permit Number: 102016-005A  
 Salisbury AG Center, Inc.  
 Chariton County, S2, T53N, R17W  
 Project Number: 2016-07-026  
 Installation Number: 041-0002

This sheet covers the period from \_\_\_\_\_ to \_\_\_\_\_.  
 (month, year) (month, year)

C1	C2	C3	C4	C5	C6
Month	Monthly Feed Shipped (tons)	Composite PM <sub>10</sub> Emission Factor (lbs PM <sub>10</sub> /ton)	Monthly Feed Mill Emissions (lbs)	Monthly Feed Mill Emissions (Tons)	12-Month PM <sub>10</sub> Emissions (Tons/Year)
Example	1,400	0.417	583.8	0.292	0.292 + previous 11 months
		0.417			
		0.417			
		0.417			
		0.417			
		0.417			
		0.417			
		0.417			
		0.417			
		0.417			
		0.417			
		0.417			
		0.417			
		0.417			
		0.417			
		0.417			

C1: Enter the Month

C2: Enter the monthly total feed shipped in units of tons per month

C3: Composite PM<sub>10</sub> Emission Factor is in units of tons PM<sub>10</sub> per ton feed shipped and considers the emissions from all emission units at the installation (EP01-EP07)

$C4 = C2 \times C3$

$C5 = C4/2000$

C6 = 12-Month Emissions (tons/year) are a rolling total calculated by adding [C5 + the total emissions of the previous eleven (11) months]. A total of less than 15.0 tons of PM<sub>10</sub> in any consecutive 12-month period indicates compliance.

## APPENDIX A

### Abbreviations and Acronyms

<b>%</b> ..... percent	<b>m/s</b> ..... meters per second
<b>°F</b> ..... degrees Fahrenheit	<b>Mgal</b> ..... 1,000 gallons
<b>acfm</b> ..... actual cubic feet per minute	<b>MW</b> ..... megawatt
<b>BACT</b> ..... Best Available Control Technology	<b>MHDR</b> ..... maximum hourly design rate
<b>BMPs</b> ..... Best Management Practices	<b>MMBtu</b> .. Million British thermal units
<b>Btu</b> ..... British thermal unit	<b>MMCF</b> ..... million cubic feet
<b>CAM</b> ..... Compliance Assurance Monitoring	<b>MSDS</b> ..... Material Safety Data Sheet
<b>CAS</b> ..... Chemical Abstracts Service	<b>NAAQS</b> .. National Ambient Air Quality Standards
<b>CEMS</b> ..... Continuous Emission Monitor System	<b>NESHAPs</b> National Emissions Standards for Hazardous Air Pollutants
<b>CFR</b> ..... Code of Federal Regulations	<b>NO<sub>x</sub></b> ..... nitrogen oxides
<b>CO</b> ..... carbon monoxide	<b>NSPS</b> ..... New Source Performance Standards
<b>CO<sub>2</sub></b> ..... carbon dioxide	<b>NSR</b> ..... New Source Review
<b>CO<sub>2e</sub></b> ..... carbon dioxide equivalent	<b>PM</b> ..... particulate matter
<b>COMS</b> ..... Continuous Opacity Monitoring System	<b>PM<sub>2.5</sub></b> ..... particulate matter less than 2.5 microns in aerodynamic diameter
<b>CSR</b> ..... Code of State Regulations	<b>PM<sub>10</sub></b> ..... particulate matter less than 10 microns in aerodynamic diameter
<b>dscf</b> ..... dry standard cubic feet	<b>ppm</b> ..... parts per million
<b>EIQ</b> ..... Emission Inventory Questionnaire	<b>PSD</b> ..... Prevention of Significant Deterioration
<b>EP</b> ..... Emission Point	<b>PTE</b> ..... potential to emit
<b>EPA</b> ..... Environmental Protection Agency	<b>RACT</b> ..... Reasonable Available Control Technology
<b>EU</b> ..... Emission Unit	<b>RAL</b> ..... Risk Assessment Level
<b>fps</b> ..... feet per second	<b>SCC</b> ..... Source Classification Code
<b>ft</b> ..... feet	<b>scfm</b> ..... standard cubic feet per minute
<b>GACT</b> ..... Generally Available Control Technology	<b>SDS</b> ..... Safety Data Sheet
<b>GHG</b> ..... Greenhouse Gas	<b>SIC</b> ..... Standard Industrial Classification
<b>gpm</b> ..... gallons per minute	<b>SIP</b> ..... State Implementation Plan
<b>gr</b> ..... grains	<b>SMAL</b> ..... Screening Model Action Levels
<b>GWP</b> ..... Global Warming Potential	<b>SO<sub>x</sub></b> ..... sulfur oxides
<b>HAP</b> ..... Hazardous Air Pollutant	<b>SO<sub>2</sub></b> ..... sulfur dioxide
<b>hr</b> ..... hour	<b>tph</b> ..... tons per hour
<b>hp</b> ..... horsepower	<b>tpy</b> ..... tons per year
<b>lb</b> ..... pound	<b>VMT</b> ..... vehicle miles traveled
<b>lbs/hr</b> ..... pounds per hour	<b>VOC</b> ..... Volatile Organic Compound
<b>MACT</b> ..... Maximum Achievable Control Technology	
<b>µg/m<sup>3</sup></b> ..... micrograms per cubic meter	