



**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: **092016-017**

Project Number: 2016-06-011  
Installation Number: 031-0112

Parent Company: SEMO Milling LLC

Parent Company Address: 261 River Road, Scott City, MO 63780

Installation Name: SEMO Milling LLC

Installation Address: 261 River Road, Scott City, MO 63780

Location Information: Scott County, S12, T30N, R14E

Application for Authority to Construct was made for:

The installation of a new sifting and enriching process for coarse cornmeal. 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.

  
Prepared by  
Chia-Wei Young  
New Source Review Unit

  
Director or Designee  
Department of Natural Resources

**SEP 27 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."*

SEMO Milling LLC

Scott County, S12, T30N, R14E

1. Control Device Requirement-Baghouse
  - A. SEMO Milling LLC shall control emissions from the following equipment using baghouses as specified in the permit application.

**Table 1: Equipment Controlled by Baghouses**

<b>Emission Point</b>	<b>Description</b>
169	310 Snackmeal Positive Pneumatic Transfer
202	310 Snackmeal Storage Tank 5B-TK-008
270	310 Snackmeal Positive Pneumatic Transfer from Storage
271	Buhler Sifter Feed in Conveyor
223	Prime Reclaim Positive Pneumatic Transfer to TK3C-TK005

- 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 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. SEMO Milling LLC shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
- E. SEMO Milling LLC shall maintain a copy of the baghouse manufacturer's performance warranty on site.
- F. SEMO Milling LLC 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

**SPECIAL CONDITIONS:**

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

- 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
2. Control Requirement - Enclosures  
SEMO Milling LLC shall enclose all equipment listed in Special Condition 1.A. with ductwork such that the only openings are for material entry and exit and emissions exiting to the control device.
3. Record Keeping Requirements  
SEMO Milling LLC 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.

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

Project Number: 2016-06-011

Installation ID Number: 031-0112

Permit Number: **092016-017**

Installation Address:

SEMO Milling LLC  
261 River Road  
Scott City, MO 63780

Parent Company:

SEMO Milling LLC  
261 River Road  
Scott City, MO 63780

Scott County, S12, T30N, R14E

REVIEW SUMMARY

- SEMO Milling LLC has applied for authority to install a new sifting and enriching process for coarse cornmeal.
- The application was deemed complete on May 31, 2016.
- HAP emissions are not expected from the proposed equipment.
- None of the NSPS apply to the proposed equipment. 40 CFR 60 Subpart DD, *Standards of Performance for Grain Elevators*, of the NSPS does not apply to this installation because the installation has maximum storage capacity less than one million bushels.
- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.
- Baghouses are being used to control the particulate emissions from some of 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 de minimis levels.
- This installation is located in Cape Girardeau 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 since potential emissions of the application are below de minimis levels.

- 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.
- A Basic Operating Permit application is required for this installation within 30 days of commencement of operations of the new equipment.
- Approval of this permit is recommended with special conditions.

### INSTALLATION DESCRIPTION

SEMO Milling LLC is an existing de minimis source located in Cape Girardeau County. The installation produces food grade corn products including flour, cornmeal, and brewer's grits. A process by-product, known as hominy, is also produced for the animal feed industry. The installation is considered a minor source for construction permits and a basic source for operating permits. Although the facility's PTE for each pollutant is less than their respective de minimis levels, the facility is required to obtain a basic operating permit because its boilers are subject to NSPS Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*.

The following New Source Review permits have been issued to SEMO Milling LLC from the Air Pollution Control Program.

**Table 2: Permit History**

Permit Number	Description
072012-014	Installation of various equipment such as degerminators, sifters, aspirators, etc.
122014-006	Handling Equipment to an existing product stream.

### PROJECT DESCRIPTION

SEMO Milling LLC proposes to add a sifting and enriching process for coarse cornmeal. New equipment includes pneumatic transfers, conveyors, feeders, and a metal detector. An existing storage tank and positive pneumatic transfer will also be used. The maximum hourly design rate of the equipment is 25 tph. There will be no additional hauling as the coarse cornmeal is an existing product at the site. Particulate emissions for the pneumatic transfers, the existing storage tank, and a feed in conveyor will be controlled by baghouses. Other equipment will be uncontrolled. There are cyclones for the pneumatic transfers, but these are considered inherent part of the process and are therefore, not required by permit condition.

### EMISSIONS/CONTROLS EVALUATION

PM<sub>2.5</sub>, PM<sub>10</sub>, and PM emissions are expected from this project. Emissions from the storage tank vent, the sifters, the feeders, and the metal detector were calculated using emission factors from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition,

Chapter 9.9.1, *Grain Elevator & Processes*, May 2003. There are no emission factors for the sifters, feeders, and the metal detector, so emission factors from handling equipment were used as it gives a reasonable estimate of emissions. Baghouses were given an efficiency of 99%. The equipment are completely enclosed except for material entry and exit, so capture efficiency is expected to be close to 100%. However, in previous site visits performed on the facility, an amount of dust that does not commensurate with 100% capture efficiency was observed on the floor of the plant. Therefore, a capture efficiency of 90% was used as a conservative estimate for emissions. Emissions from the pneumatic transfers were calculated using emission factors from for cement unloading to elevated storage silo in AP-42, Chapter 11.12, *Concrete Batching*, June 2006. Using these emission factors should yield a conservative estimate of emissions because cement is finer than cornmeal and its emissions should be higher. These emission factors include the use of baghouses so no additional efficiency was given.

The following table provides an emissions summary for this project. Existing potential emissions were taken from Permit No. 122014-006. Existing actual emissions were taken from the installation's 2015 EIQ. Potential emissions of the application represent the potential of the equipment, assuming continuous operation (8760 hours per year).

**Table 3: Emissions Summary (tpy)**

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2015 EIQ)	Potential Emissions of the Project	New Installation Conditioned Potential
PM	25.0	N/D	N/D	21.39	N/A
PM <sub>10</sub>	15.0	14.12	2.42	11.76	N/A
PM <sub>2.5</sub>	10.0	5.23	1.43	2.10	N/A
SO <sub>x</sub>	40.0	0.1	0.004	N/A	N/A
NO <sub>x</sub>	40.0	5.3	0.30	N/A	N/A
VOC	40.0	0.7	0.04	N/A	N/A
CO	100.0	4.5	0.26	N/A	N/A
GHG (CO <sub>2</sub> e)	100,000	N/D	N/D	N/A	N/A
GHG (mass)	250.0	N/D	N/D	N/A	N/A
HAPs	10.0/25.0	0.5	0.00	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 de minimis levels.

## APPLICABLE REQUIREMENTS

SEMO Milling LLC 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
- *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*, 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 May 26, 2016, received May 31, 2016, designating SEMO Milling LLC as the owner and operator of the installation.

## 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		

2016-06-011 SEMO Milling LLC  
PTE Calculation

EU	Description	MHDR (tph)	Unc EF (lb/ton)			Unc E (lb/hr)			Unc E (tpy)			Control	Control %	Cont E (tpy)			6.400 Limit
			PM2.5	PM10	PM	PM2.5	PM10	PM	PM2.5	PM10	PM			PM2.5	PM10	PM	
202	310 Snackmeal Storage Tank Vent	25	0.0011	0.0063	0.025	0.0275	0.1575	0.625	0.12045	0.68985	2.7375	Baghouse	89%	0.013129	0.075194	0.298388	36.12402113
270	Pneumatic Transfer from Storage	25	0.00034	0.00034	0.00099	0.0085	0.0085	0.02475	0.03723	0.03723	0.108405	Baghouse	0%	0.03723	0.03723	0.108405	36.12402113
271	Buhler Sifter feed in Conveyor	25	0.0058	0.034	0.061	0.145	0.85	1.525	0.6351	3.723	6.6795	Baghouse	89%	0.069226	0.405807	0.728066	36.12402113
272	Buher Finished Product Sifter	25	0.0058	0.034	0.061	0.145	0.85	1.525	0.6351	3.723	6.6795	None	0%	0.6351	3.723	6.6795	36.12402113
223	Prime Reclaim Positive Pneumatic Transfer to TK5C-TK005	25	0.00034	0.00034	0.00099	0.0085	0.0085	0.02475	0.03723	0.03723	0.108405	Baghouse	0%	0.03723	0.03723	0.108405	36.12402113
273	Enrichment Feeder 310 Snackmeal	25	0.0058	0.034	0.061	0.145	0.85	1.525	0.6351	3.723	6.6795	None	0%	0.6351	3.723	6.6795	36.12402113
274	Metal Detector 310 Snackmeal	25	0.0058	0.034	0.061	0.145	0.85	1.525	0.6351	3.723	6.6795	None	0%	0.6351	3.723	6.6795	36.12402113
169	310 Snackmeal Positive Pneumatic Transfer	25	0.00034	0.00034	0.00099	0.0085	0.0085	0.02475	0.03723	0.03723	0.108405	Baghouse	0%	0.03723	0.03723	0.108405	36.12402113
<b>Total =</b>													2.099345	11.76169	21.39017		



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

## DEPARTMENT OF NATURAL RESOURCES

[www.dnr.mo.gov](http://www.dnr.mo.gov)

**SEP 27 2016**

Mr. Charles Schiwitz  
Project/Environmental/Health Safety Manager  
SEMO Milling LLC  
261 River Road  
Scott City, MO 63780

RE: New Source Review Permit - Project Number: 2016-06-011

Dear Mr. Schiwitz:

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, 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.

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 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).

Mr. Charles Schiwitz  
Page Two

If you have any questions regarding this permit, please do not hesitate to contact Young, Chia-Wei, 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:cj

Enclosures

c: Southeast Regional Office  
PAMS File: 2016-06-011

Permit Number: **092016-017**