

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: 122017-012

Project Number: 2017-09-017
Installation Number: 031-0112

Parent Company: SEMO Milling, LLC

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

Installation Name: SEMO Milling, LLC

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

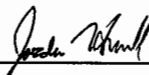
Location Information: Cape Girardeau County, S28, T30N, R14E

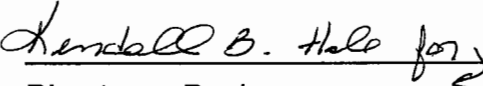
Application for Authority to Construct was made for:

Addition of new processes and associated equipment for expansion of various corn milling equipment for the purpose of collecting, diverting, and sifting existing mill flows for greater production flexibility. 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
Jordan Hull
New Source Review Unit


Director or Designee
Department of Natural Resources
DEC 28 2017

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

Cape Girardeau County, S28, T30N, R14E

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

Table 1: Equipment Controlled by Baghouses

| Emission Unit: | Description: | Control ID: |
|-----------------------|---|--------------------|
| EU-267 | #7 Satake degermer: 2nd FL | C106 |
| EU-309 | Pneumatic transfer system gravity table top cut | C106 |
| EU-310 | Positive pneumatic transfer system 610 | C106 |
| EU-311 | Cones negative lift transfer system 1 East :4th FL | C110 |
| EU-312 | Cones negative lift transfer system 2 East :4th FL | C110 |
| EU-313 | 2nd Reduction negative lift transfer system 1 East: 4th FL | C110 |
| EU-314 | 2nd Reduction negative lift transfer system 2 East: 4th FL | C110 |
| EU-315 | Norvell sifter 6 box: 3rd FL | C110 |
| EU-316 | Positive pneumatic transfer system #7 Satake tailstock: 4th FL | C107 |
| EU-317 | Davis corn cutters #1 | C109 |
| EU-318 | Davis corn cutter #1 positive pneumatic transfer system: 4th FL | C107 |
| EU-319 | 610 Collection conveyor | C110 |
| EU-321 | Positive pneumatic transfer to Greatwestern sifter | C106 |
| EU-322 | Positive pneumatic transfer to Macrowave | C106 |
| EU-323 | Macrowave feed in conveyor | C111 |
| EU-325 | Macrowave feed out conveyor | C111 |
| EU-326 | Positive pneumatic transfer to aspirator/cooler | C106 |
| EU-327 | Macrowave aspirator cooler | C106 |
| EU-328 | Positive pneumatic transfer Macrowave asp/cool to storage | C123 |
| EU-329 | Thermal treatment screw feed in conveyor | C111 |
| EU-330 | Thermal treatment screw feed in conveyor | C111 |
| EU-331 | Positive pneumatic transfer from thermal to mill | C110 |

SPECIAL CONDITIONS:

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

- 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). The replacement filter material type shall meet or exceed the specifications of the existing filter. The air to cloth ratio shall not be increased when filter replacement is performed.
 - 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 and filters manufacturer's performance warranties 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
 - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
2. Capture Requirement
- A. SEMO Milling, LLC shall enclose all equipment listed in Special Condition 1.A. such that the only openings are for material entry & exit, and emissions exiting the control devices.
3. Record Keeping and Reporting Requirements
- A. SEMO Milling, LLC 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. SEMO Milling, LLC shall report to the Air Pollution Control Program's Compliance/Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or by email at AirComplianceReporting@dnr.mo.gov, 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 (5) REVIEW

Project Number: 2017-09-017
Installation ID Number: 031-0112
Permit Number: 122017-012

Installation Address:
SEMO Milling, LLC
261 River Rd
Scott City, MO 63780

Parent Company:
SEMO Milling, LLC
261 River Rd
Scott City, MO 63780

Cape Girardeau County, S28, T30N, R14E

REVIEW SUMMARY

- SEMO Milling, LLC has applied for authority to install new processes and associated equipment for expansion of various corn milling equipment for the purpose of collecting, diverting, and sifting existing mill flows for greater production flexibility.
- The application was deemed complete on September 18, 2017.
- 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*, of the NSPS does not apply to this installation because the installation has a 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 PM, PM₁₀, PM_{2.5} 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 conditioned 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 equipment startup.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

SEMO Milling, LLC is an existing minor 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.

The following New Source Review permits have been issued to SEMO Milling, LLC from the Air Pollution Control Program. Project number: 2017-07-001 was closed out and combined with this project as it was still in house when this project was received.

Table 2: Permit History

| Permit Number | Description |
|---------------|--|
| 072012-014 | Installation of various equipment such as degerminators, sifters, aspirators, ect. |
| 122014-006 | Handling Equipment to an existing product stream. |
| 032015-008 | Blending system. |
| 092016-017 | New sifting and enriching process for coarse cornmeal. |

PROJECT DESCRIPTION

SEMO Milling, LLC proposed the installation and operational expansion of various corn milling equipment as listed for the purpose of collecting, diverting, milling, and sifting existing mill flows for a greater production flexibility. This project also has an addition of a new process and associated equipment for collecting existing sifted/separated mill streams. None of the additions will debottleneck the existing product flows. These process additions are being added for safety, efficiency, and quality measures. They are all located in the same existing structure.

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 a permit condition. The cyclones are

used as a pre-separator to prevent clogging of the baghouse and are viewed as

inherent because they must be used to prevent product loss from the product streams pneumatic transfer of certain products.

These changes re-route existing product streams for further thermal treatment, grinding and sifting to make combining streams more efficient for existing products. Thus, there are no increases in MHDR of the existing equipment and no increases in haul road traffic.

Table 3: Project Emission Units

| Emission Unit | Description: | MHDR (tph) |
|----------------------|---|-------------------|
| EU-267 | #7 Satake degermer: 2nd FL | 2.25 |
| EU-309 | Pneumatic transfer system gravity table top cut | 5.00 |
| EU-310 | Positive pneumatic transfer system 610 | 3.00 |
| EU-311 | Cones negative lift transfer system 1 East : 4th FL | 3.00 |
| EU-312 | Cones negative lift transfer system 2 East : 4th FL | 3.00 |
| EU-313 | 2nd Reduction negative lift transfer system 1 East: 4th FL | 3.00 |
| EU-314 | 2nd Reduction negative lift transfer system 2 East: 4th FL | 1.50 |
| EU-315 | Norvell sifter 6 box: 3rd FL | 18.00 |
| EU-316 | Positive pneumatic transfer system #7 Satake tailstock: 4th FL | 4.75 |
| EU-317 | Davis corn cutters #1 | 3.00 |
| EU-318 | Davis corn cutter #1 positive pneumatic transfer system: 4th FL | 3.00 |
| EU-319 | 610 Collection conveyor | 3.00 |
| EU-320 | Premium meal collection screw to Greatwestern sifter | 4.05 |
| EU-321 | Positive pneumatic transfer to Greatwestern sifter | 4.05 |
| EU-322 | Positive pneumatic transfer to Macrowave | 3.00 |
| EU-323 | Macrowave feed in conveyor | 3.00 |
| EU-324 | Macrowave thermal treatment conveyor | 3.00 |
| EU-325 | Macrowave feed out coneyor | 3.00 |
| EU-326 | Positive pneumatic transfer to aspirator/cooler | 3.00 |
| EU-327 | Macrowave aspirator cooler | 3.00 |
| EU-328 | Positive pneumatic transfer Macrowave asp/cool to storage | 3.00 |
| EU-329 | Thermal treatment screw feed in conveyor | 3.00 |
| EU-330 | Thermal treatment screw feed in conveyor | 3.00 |
| EU-331 | Positive pneumatic transfer from thermal to mill | 3.00 |

EMISSIONS/CONTROLS EVALUATION

PM_{2.5}, PM₁₀, and PM emissions are expected from this project. Emissions from the storage tank vents, sifters, and feeders, 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 and feeders, 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 is 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. No emission factors for PM_{2.5} were found so all PM₁₀ emissions were considered PM_{2.5}. These emission factors include the use of baghouses so no additional control efficiency was given.

The following table provides an emissions summary for this project. Existing potential emissions were taken from Permit number 092016-017. Existing actual emissions were taken from the installation's 2016 EIQ. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year).

Table 4: Emissions Summary (tpy)

| Pollutant | Regulatory <i>De Minimis</i> Levels | Existing Potential Emissions | Existing Actual Emissions (2016 EIQ) | Potential Emissions of the Project | Conditioned Potential Emissions of the Project |
|-------------------------|---|------------------------------------|---|---|--|
| PM | 25.0 | N/D | N/A | 16.05 | 4.66 |
| PM ₁₀ | 15.0 | 25.88 | 2.42 | 8.90 | 1.95 |
| PM _{2.5} | 10.0 | 6.66 | 1.43 | 4.90 | 1.35 |
| SO _x | 40.0 | 0.1 | 0.0004 | N/A | N/A |
| NO _x | 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 ₂ e) | N/A | N/D | N/D | N/A | N/A |
| GHG (mass) | N/A | 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.

GENERAL REQUIREMENTS

- *Operating Permits*, 10 CSR 10-6.065
- *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.
- *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 September 6, 2017, received September 11, 2017, designating SEMO Milling, LLC as the owner and operator of the installation.

APPENDIX A

Abbreviations and Acronyms

| | |
|--|---|
| %percent | Mgal1,000 gallons |
| °Fdegrees Fahrenheit | MWmegawatt |
| acfmactual cubic feet per minute | MHDRmaximum hourly design rate |
| BACTBest Available Control Technology | MMBtuMillion British thermal units |
| BMPsBest Management Practices | MMCFmillion cubic feet |
| BtuBritish thermal unit | MSDSMaterial Safety Data Sheet |
| CAM Compliance Assurance Monitoring | NAAQSNational Ambient Air Quality Standards |
| CAS Chemical Abstracts Service | NESHAPs National Emissions Standards for Hazardous Air Pollutants |
| CEMS Continuous Emission Monitor System | NO_xnitrogen oxides |
| CFRCode of Federal Regulations | NSPSNew Source Performance Standards |
| COcarbon monoxide | NSRNew Source Review |
| CO₂carbon dioxide | PMparticulate matter |
| CO_{2e}carbon dioxide equivalent | PM_{2.5}particulate matter less than 2.5 microns in aerodynamic diameter |
| COMSContinuous Opacity Monitoring System | PM₁₀particulate matter less than 10 microns in aerodynamic diameter |
| CSRCode of State Regulations | ppmparts per million |
| dscfdry standard cubic feet | PSDPrevention of Significant Deterioration |
| EIQEmission Inventory Questionnaire | PTEpotential to emit |
| EPEmission Point | RACTReasonable Available Control Technology |
| EPA Environmental Protection Agency | RALRisk Assessment Level |
| EU Emission Unit | SCCSource Classification Code |
| fpsfeet per second | scfmstandard cubic feet per minute |
| ftfeet | SDSSafety Data Sheet |
| GACT Generally Available Control Technology | SICStandard Industrial Classification |
| GHGGreenhouse Gas | SIPState Implementation Plan |
| gpmgallons per minute | SMALScreening Model Action Levels |
| grgrains | SO_xsulfur oxides |
| GWP Global Warming Potential | SO₂sulfur dioxide |
| HAPHazardous Air Pollutant | SSMStartup, Shutdown & Malfunction |
| hrhour | tphtons per hour |
| hphorsepower | tpytons per year |
| lbpound | VMTvehicle miles traveled |
| lbs/hrpounds per hour | VOCVolatile Organic Compound |
| MACTMaximum Achievable Control Technology | |
| µg/m³micrograms per cubic meter | |
| m/smeters per second | |

2017-09-017 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) | | | EF Source |
|------|---|------------|-----------------|---------|---------|---------------|---------|---------|-------------|---------|----------|---------------|-----------|--------------|-------|-------|--|
| | | | PM2.5 | PM10 | PM | PM2.5 | PM10 | PM | PM2.5 | PM10 | PM | | | PM2.5 | PM10 | PM | |
| 267 | #7 satake Degermer: 2nd FL | 2.25000 | 0.06700 | 0.06700 | 0.06700 | 0.15075 | 0.15075 | 0.15075 | 0.66029 | 0.66029 | 0.66029 | Baghouse | 89% | 0.072 | 0.072 | 0.072 | No EF under scc code. Used EF for 30200817, hammermill for animal feed mills. EF controlled with cyclone |
| 309* | Pneumatic Transfer system gravity table top cut | 5.00000 | 0.00034 | 0.00034 | 0.00099 | 0.00170 | 0.00170 | 0.00495 | 0.00745 | 0.00745 | 0.02168 | Built into EF | 0% | 0.007 | 0.007 | 0.022 | AP-42 Chapter 11.12, Concrete Batching, June 2006 |
| 310* | Positive pneumatic transfer system 610 | 3.00000 | 0.00034 | 0.00034 | 0.00099 | 0.00102 | 0.00102 | 0.00297 | 0.00447 | 0.00447 | 0.01301 | Built into EF | 0% | 0.004 | 0.004 | 0.013 | AP-42 Chapter 11.12, Concrete Batching, June 2006 |
| 311 | Cones negative lift transfer system 1 East :4th FL | 3.00000 | 0.00580 | 0.03400 | 0.06100 | 0.01740 | 0.10200 | 0.18300 | 0.07621 | 0.44676 | 0.80154 | Baghouse | 89% | 0.008 | 0.049 | 0.087 | AP- 42 Chapter 9.9.1 Table 9.9.1-1. Grain handling |
| 312 | Cones negative lift transfer system 2 East :4th FL | 3.00000 | 0.00580 | 0.03400 | 0.06100 | 0.01740 | 0.10200 | 0.18300 | 0.07621 | 0.44676 | 0.80154 | Baghouse | 89% | 0.008 | 0.049 | 0.087 | AP- 42 Chapter 9.9.1 Table 9.9.1-1. Grain handling |
| 313 | 2nd Reduction Negative lift transfer system 1 East: 4th FL | 1.50000 | 0.00580 | 0.03400 | 0.06100 | 0.00870 | 0.05100 | 0.09150 | 0.03811 | 0.22338 | 0.40077 | Baghouse | 89% | 0.004 | 0.024 | 0.044 | AP- 42 Chapter 9.9.1 Table 9.9.1-1. Grain handling |
| 314 | 2nd Reduction Negative lift transfer system 2 East: 4th FL | 1.50000 | 0.00580 | 0.03400 | 0.06100 | 0.00870 | 0.05100 | 0.09150 | 0.03811 | 0.22338 | 0.40077 | Baghouse | 89% | 0.004 | 0.024 | 0.044 | AP- 42 Chapter 9.9.1 Table 9.9.1-1. Grain handling |
| 315 | Norvell sifter 6 box: 3rd FL | 18.00000 | 0.00580 | 0.03400 | 0.06100 | 0.10440 | 0.61200 | 1.09800 | 0.45727 | 2.68056 | 4.80924 | Baghouse | 89% | 0.050 | 0.292 | 0.524 | AP- 42 Chapter 9.9.1 Table 9.9.1-1. Grain handling |
| 316* | Positive pneumatic transfer system #7 Satake tailstock:4th FL | 4.75000 | 0.00034 | 0.00034 | 0.06100 | 0.00162 | 0.00162 | 0.28975 | 0.00707 | 0.00707 | 1.26911 | Built into EF | 0% | 0.007 | 0.007 | 1.269 | AP-42 Chapter 11.12, Concrete Batching, June 2006 |
| 317 | Davis Corn Cutters #1 | 3.00000 | 0.06700 | 0.06700 | 0.06700 | 0.20100 | 0.20100 | 0.20100 | 0.88038 | 0.88038 | 0.88038 | Baghouse | 89% | 0.096 | 0.096 | 0.096 | No EF under scc code. Used EF for 30200817, hammermill for animal feed mills. EF controlled with cyclone |
| 318* | Davis Corn Cutter #1 positive pneumatic transfer system: 4th FL | 3.00000 | 0.00034 | 0.00034 | 0.00099 | 0.00102 | 0.00102 | 0.00297 | 0.00447 | 0.00447 | 0.01301 | Built into EF | 0% | 0.004 | 0.004 | 0.013 | AP-42 Chapter 11.12, Concrete Batching, June 2006 |
| 319 | 610 Collection conveyor | 3.00000 | 0.00580 | 0.03400 | 0.06100 | 0.01740 | 0.10200 | 0.18300 | 0.07621 | 0.44676 | 0.80154 | Baghouse | 89% | 0.008 | 0.049 | 0.087 | AP- 42 Chapter 9.9.1 Table 9.9.1-1. Grain handling |
| | | | | | | 0.53111 | 1.37711 | 2.48239 | 2.32624 | 6.03172 | 10.87287 | | Total = | 0.274 | 0.678 | 2.358 | |

| EU | Description | MHDR (tph) | Unc EF (lb/ton) | | | Unc E (lb/hr) | | | Unc E (tpy) | | | Control | Control % | Cont E (tpy) | | | EF Source |
|------|--|------------|-----------------|---------|---------|---------------|---------|---------|-------------|---------|---------|---------------|-----------|--------------|----------|----------|--|
| | | | PM2.5 | PM10 | PM | PM2.5 | PM10 | PM | PM2.5 | PM10 | PM | | | PM2.5 | PM10 | PM | |
| 320 | Premium meal collection screw to greatwestern sifter | 4.05000 | 0.00580 | 0.03400 | 0.06100 | 0.02349 | 0.13770 | 0.24705 | 0.10289 | 0.60313 | 1.08208 | none | 0% | 0.102886 | 0.603126 | 1.082079 | AP- 42 Chapter 9.9.1 Table 9.9.1-1. Grain handling |
| 321* | Positive pneumatic transfer to greatwestern sifter | 4.05000 | 0.00034 | 0.00034 | 0.00099 | 0.00138 | 0.00138 | 0.00401 | 0.00603 | 0.00603 | 0.01756 | Built into EF | 0% | 0.006031 | 0.006031 | 0.017562 | AP-42 Chapter 11.12, Concrete Batching, June 2006 |
| 322* | Positive pneumatic transfer to Macrowave | 3.00000 | 0.00034 | 0.00034 | 0.00099 | 0.00102 | 0.00102 | 0.00297 | 0.00447 | 0.00447 | 0.01301 | Built into EF | 0% | 0.004468 | 0.004468 | 0.013009 | AP-42 Chapter 11.12, Concrete Batching, June 2006 |
| 323 | Macrowave feed in conveyor | 3.00000 | 0.05800 | 0.03400 | 0.06100 | 0.17400 | 0.10200 | 0.18300 | 0.76212 | 0.44676 | 0.80154 | Baghouse | 89% | 0.083071 | 0.048697 | 0.087368 | AP- 42 Chapter 9.9.1 Table 9.9.1-1. Grain handling |
| 324 | Macrowave thermal treatment conveyor | 3.00000 | 0.05800 | 0.03400 | 0.06100 | 0.17400 | 0.10200 | 0.18300 | 0.76212 | 0.44676 | 0.80154 | none | 0% | 0.76212 | 0.44676 | 0.80154 | AP- 42 Chapter 9.9.1 Table 9.9.1-1. Grain handling |

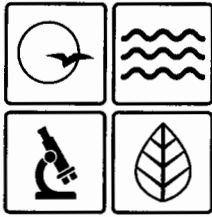
2017-09-017 SEMO Milling LLC
PTE Calculation

| | | | | | | | | | | | | | | | | | |
|------|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------|---------|----------|----------|----------|---|
| 325 | Macrowave feed out coneyor | 3.00000 | 0.05800 | 0.03400 | 0.06100 | 0.17400 | 0.10200 | 0.18300 | 0.76212 | 0.44676 | 0.80154 | Baghouse | 89% | 0.083071 | 0.048697 | 0.087368 | AP-42 Chapter 9.9.1 Table 9.9.1-1. Grain handling |
| 326* | Positive pneumatic transfer to aspirator/cooler | 3.00000 | 0.00034 | 0.00034 | 0.00099 | 0.00102 | 0.00102 | 0.00297 | 0.00447 | 0.00447 | 0.01301 | Built into EF | 0% | 0.004468 | 0.004468 | 0.013009 | AP-42 Chapter 11.12, Concrete Batching, June 2006 |
| 327 | Macrowave aspirator cooler | 3.00000 | 0.00034 | 0.00034 | 0.00099 | 0.00102 | 0.00102 | 0.00297 | 0.00447 | 0.00447 | 0.01301 | Baghouse | 89% | 0.000487 | 0.000487 | 0.001418 | AP-42 Chapter 9.9.1 Table 9.9.1-1. Grain handling |
| 328* | Positive pneumatic transfer Macrowave asp/cool to storage | 3.00000 | 0.00034 | 0.00034 | 0.00099 | 0.00102 | 0.00102 | 0.00297 | 0.00447 | 0.00447 | 0.01301 | Built into EF | 0% | 0.004468 | 0.004468 | 0.013009 | AP-42 Chapter 11.12, Concrete Batching, June 2006 |
| 329 | Thermal Treatment screw feed in conveyor | 3.00000 | 0.00580 | 0.03400 | 0.06100 | 0.01740 | 0.10200 | 0.18300 | 0.07621 | 0.44676 | 0.80154 | Baghouse | 89% | 0.008307 | 0.048697 | 0.087368 | AP-42 Chapter 9.9.1 Table 9.9.1-1. Grain handling |
| 330 | Thermal Treatment screw feed in conveyor | 3.00000 | 0.00580 | 0.03400 | 0.06100 | 0.01740 | 0.10200 | 0.18300 | 0.07621 | 0.44676 | 0.80154 | Baghouse | 89% | 0.008307 | 0.048697 | 0.087368 | AP-42 Chapter 9.9.1 Table 9.9.1-1. Grain handling |
| 331* | Positive pneumatic transfer from thermal to mill | 3.00000 | 0.00034 | 0.00034 | 0.00099 | 0.00102 | 0.00102 | 0.00297 | 0.00447 | 0.00447 | 0.01301 | Built into EF | 0% | 0.004468 | 0.004468 | 0.013009 | AP-42 Chapter 11.12, Concrete Batching, June 2006 |
| | | | | | | 0.58677 | 0.65418 | 1.18091 | 2.57004 | 2.86530 | 5.17238 | | Total = | 1.072151 | 1.269062 | 2.304104 | |

| Summary: | De Minimis Levels | Unc E (tpy) | Cont E (tpy) |
|----------|-------------------|-------------|--------------|
| PM | 25 | 16.05 | 4.663 |
| PM10 | 15 | 8.90 | 1.947 |
| PM2.5 | 10 | 4.90 | 1.347 |

*A controlled EF for Pneumatic transfer was used from 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. No emission factors for PM2.5 were found so all PM10 emissions were considered PM2.5
(reason there is no control efficiency applied in the table for pneumatic transfer)

| | |
|------|------|
| 267 | C106 |
| 309* | C106 |
| 310* | C106 |
| | C110 |
| 311 | |
| 312 | C110 |
| 313 | C110 |
| 314 | C110 |
| 315 | C110 |
| 316* | C107 |
| 317 | C109 |
| 318* | C107 |
| 319 | C110 |
| 320 | none |
| 321* | C106 |
| 322* | C106 |
| 323 | C111 |
| 324 | none |
| 325 | C111 |
| 326* | C106 |
| 327 | C106 |
| 328* | C123 |
| 329 | C111 |
| 330 | C111 |
| 331* | C110 |



Missouri Department of dnr.mo.gov

NATURAL RESOURCES

Eric R. Greitens, Governor

Carol S. Comer, Director

DEC 28 2017

Mr. Charles Schiwitz
EHS Manager
SEMO Milling, LLC
261 River Rd
Cape Girardeau, MO 63702

RE: New Source Review Permit - Project Number: 2017-09-017

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 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.



Recycled paper

Mr. Charles Schiwitz
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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: Southeast Regional Office
PAMS File: 2017-09-017

Permit Number: 122017-012