



Missouri Department of dnr.mo.gov

NATURAL RESOURCES

Michael L. Parson, Governor

Carol S. Comer, Director

November 16, 2020

Scott Bauer
Secretary
Stover Milling Co.
P.O. Box 190
Stover, MO 65078

RE: New Source Review Permit - Project Number: 2020-08-011

Dear Scott Bauer:

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 and your new source review permit application are 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



Scott Bauer
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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.ao.mo.gov/ahc.

If you have any questions regarding this permit, please do not hesitate to contact Dakota Fox 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



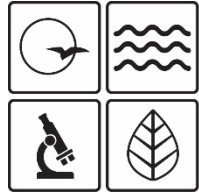
Susan Heckenkamp
New Source Review Unit Chief

SH:dfa

Enclosures

c: Southwest Regional Office
PAMS File: 2020-08-011

Permit Number: 112020-010



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: 112020-010 Project Number: 2020-08-011
Installation Number: 141-0036

Parent Company: Stover Milling Co.

Parent Company Address: P.O. Box 190, Stover, MO 65078

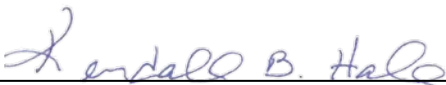
Installation Name: Stover Milling Co.

Installation Address: Junction of MO-52 and Hwy N, Stover, MO 65078

Location Information: Morgan County, S35, T43N, R19W

Application for Authority to Construct was made for:
Installation of a new feed manufacturing facility. 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.



Director or Designee
Department of Natural Resources

November 16, 2020
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 to 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 (3)(E). "Conditions required by permitting authority."

Stover Milling Co.
Morgan County, S35, T43N, R19W

1. PM₁₀ Emission Limitation
 - A. The permittee shall emit less than 15.0 tons of PM₁₀ in any consecutive 12-month period from the entire installation (see table 1 in the Installation/Project Description section).
 - B. The permittee shall include all actual emissions in the limit including SSM emissions as well as any excess SSM emissions as reported to the Air Pollution Control Program's Compliance/Enforcement Section in accordance with the requirements of 10 CSR 10-6.050 *Start-Up, Shutdown, and Malfunction Conditions*.
 - C. 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. Record Keeping and Reporting Requirements
 - A. The permittee 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. The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 and 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: 2020-08-011
Installation ID Number: 141-0036
Permit Number:112020-010

Installation Address:
Stover Milling Co.
Junction of MO-52 and Hwy N
Stover, MO 65078
Morgan County, S35, T43N, R19W

Parent Company:
Stover Milling Co.
P.O. Box 190
Stover, MO 65078

REVIEW SUMMARY

- The permittee has applied for authority to install a new feed manufacturing facility.
- The application was deemed complete on August 13, 2020.
- HAP emissions are not expected from the proposed equipment.
- None of the New Source Performance Standards (NSPS) apply to the installation.
- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.
- No air pollution control equipment is being used in association with the new equipment.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM₁₀ are conditioned below de minimis levels.
- This installation is located in Morgan County, an attainment/unclassifiable 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.

- No Operating Permit is required for this installation.
- Approval of this permit is recommended with special conditions.

INSTALLATION / PROJECT DESCRIPTION

The proposed mill will be used to manufacture feed for a variety of animals into a finished form that will include bulk and bagged products. All trucks that load and unload will be using a gravel road built on the property. Trucks coming in to unload bulk ingredients will first come across the weigh scale and then go to the receiving pit. Once over the pit, the driver will unroll the trap or lift the end gate to start the process of unloading into the pit. The pit auger will feed a receiving leg that is capable of unloading 4,000 bushels per hour of corn. Other ingredients unloaded will be unloaded at a slower rate.

After identifying the product to be unloaded, the operator will determine which bin it will be put into. All ingredients will have their own certain bin. Corn will have 2 different flow paths: a 50,000 bushel corn storage bin and a 1500 bushel bin that will have a direct auger that will feed a roller mill. From the roller mill, the corn will travel back through the receiving leg and enter the appropriate ingredient bin.

Received tote bags will both be stored in a warehouse in appropriate areas. The totes will have a minors system they will be placed onto that will allow operators to open the bottom of the totes. The auger will unload the totes out of the bottom directly into the weigh hopper. The bag ingredients will be opened and weighed out by hand and added directly to the mixer through a hand add door. Once the hand added ingredients are in the mixer, the mixer will mix all ingredients for 3 minutes.

All ingredient bins will have an auger that will directly feed a weigh hopper. The weigh hopper is just used to weigh out the ingredients that will be mixed together to make a finished feed. When all the ingredients are put into the weigh hopper there will be doors on the bottom that will open and all the feed will fall into the mixer in a matter of seconds. There will be a set of intervents that displace the air and dust and feed them back into the weigh hopper to keep all dust contained. Once all ingredients are added to the mixer it will mix for 3 minutes.

After the mixing is complete, the doors on the bottom of the mixer will open and the mixed feed will fall into a surge hopper in a matter of seconds. Again, intervents will be used on the mixer to keep all the dust contained. The finished feed will then be taken to the leg via a conveyor system. The loadout leg will take the finished either to the loadout bins for bulk load out, or to the bagging bin.

There will be six different truck loadout bins that the finished feed can go into. The operator of the mixing system will determine which bins the finished feed will go into and will be written so that the truck drivers will know exactly which bin they need to load out of. The drivers will then load the feed into the appropriate bin in the truck.

If the feed needs to be bagged, then the operator will put the finished feed into the bagging bin. Once it is in there, the operator of the bagging machine will begin to bag the feed. Operators will place a bag on the bagging spout and depress the pedal to start the filling of the bag. While the bag is filling they will put a feed tag sticker on the bag to identify the product. The bagger will automatically fill the bag to 50 lbs, then it will release the bag onto a conveyor that will take the bag through a sewing machine and then the operator will palletize the bag. Once finished, the pallet will be taken to the appropriate place for storage in the warehouse.

No permits have been issued to Stover Milling Co. from the Air Pollution Control Program.

Table 1: Emission Point Summary

Emission Point #	Description	MHDR
EP-01	Material Haul Road	4,000 Bu/hr
EP-02	Truck Unloading	4,000 Bu/hr
EP-03	Bin	55,500 Bushels
EP-04	Roller Mill	1,000 Bu/hr
EP-05	Mixer	4,000 Bu/hr
EP-06	Loadout Bins	4,000 Bu/hr
EP-07	Truck Loading	4,000 Bu/hr
EP-08	Product Haul Road	4,000 Bu/hr
EP-09	Bagging Bins	4,000 Bu/hr
EP-10	Bagging Machine	4,000 Bu/hr
EP-11	Grain Handling	4,000 Bu/hr

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, Table 9.9.1-1 of AP-42 Chapter 9.9.1, *Grain Elevators and Processes* (May 2003). Grain receiving was assumed to occur with only straight trucks. This is a conservative estimate as the emission factor for straight trucks is higher than that of hopper trucks. The emission factor for the roller mill was calculated using the values for baghouse and cyclone controlled hammer mills from Table 9.9.1-2. It was estimated that an 80% control efficiency was attributed for the use of a baghouse and a 99% control efficiency was attributed for the use of a cyclone. The average of the back calculated uncontrolled emission factors were used, and Appendix B, Table 2.2 was used to determine that 61% of PM qualifies as PM₁₀ and 23% of PM qualifies as PM_{2.5}.

PM, PM₁₀, and PM_{2.5} emissions from haul roads and vehicular activity areas were calculated using the predictive equation from AP-42, Section 13.2.2 *Unpaved Roads* (November 2006). No controls are in place, so only credit for Missouri's average rainfall was given.

The following table provides an emissions summary for this project. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year).

Table 2: Emissions Summary (tpy)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Potential Emissions of the Project	New Installation Conditioned Potential
PM	25.0	N/A	349.64	46.57
PM ₁₀	15.0	N/A	112.62	< 15.0
PM _{2.5}	10.0	N/A	13.15	1.75
SO _x	40.0	N/A	N/A	N/A
NO _x	40.0	N/A	N/A	N/A
VOC	40.0	N/A	N/A	N/A
CO	100.0	N/A	N/A	N/A
GHG (CO _{2e})	N/A	N/A	N/A	N/A
GHG (mass)	N/A	N/A	N/A	N/A
HAPs	10.0/25.0	N/A	N/A	N/A

N/A = Not Applicable

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 PM₁₀ are conditioned below de minimis levels.

APPLICABLE REQUIREMENTS

The permittee 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

- *Start-Up, Shutdown, and Malfunction Conditions*, 10 CSR 10-6.050
- *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

SPECIFIC REQUIREMENTS

- *No New Source Performance Regulations (NSPS), MACT Regulations, or Emission Standards for Hazardous Air Pollutants (NESHAP)* apply to the installation.
- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10 6.400. An allowable emission rate of 96.8 lb/hr was calculated. The actual emission rate is 27.1 lb/hr.

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 August 13, 2020, received August 13, 2020, designating Stover Milling Co. as the owner and operator of the installation.

APPENDIX A

Abbreviations and Acronyms

% percent	Mgal 1,000 gallons
°F degrees Fahrenheit	MW megawatt
acfm actual cubic feet per minute	MHDR maximum hourly design rate
BACT Best Available Control Technology	MMBtu Million British thermal units
BMPs Best Management Practices	MMCF million cubic feet
Btu British thermal unit	MSDS Material Safety Data Sheet
CAM Compliance Assurance Monitoring	NAAQS National Ambient Air Quality Standards
CAS Chemical Abstracts Service	NESHAPs National Emissions Standards for Hazardous Air Pollutants
CEMS Continuous Emission Monitor System	NO_x nitrogen oxides
CFR Code of Federal Regulations	NSPS New Source Performance Standards
CO carbon monoxide	NSR New Source Review
CO₂ carbon dioxide	PM particulate matter
CO_{2e} carbon dioxide equivalent	PM_{2.5} particulate matter less than 2.5 microns in aerodynamic diameter
COMS Continuous Opacity Monitoring System	PM₁₀ particulate matter less than 10 microns in aerodynamic diameter
CSR Code of State Regulations	ppm parts per million
dscf dry standard cubic feet	PSD Prevention of Significant Deterioration
EIQ Emission Inventory Questionnaire	PTE potential to emit
EP Emission Point	RACT Reasonable Available Control Technology
EPA Environmental Protection Agency	RAL Risk Assessment Level
EU Emission Unit	SCC Source Classification Code
fps feet per second	scfm standard cubic feet per minute
ft feet	SDS Safety Data Sheet
GACT Generally Available Control Technology	SIC Standard Industrial Classification
GHG Greenhouse Gas	SIP State Implementation Plan
gpm gallons per minute	SMAL Screening Model Action Levels
gr grains	SO_x sulfur oxides
GWP Global Warming Potential	SO₂ sulfur dioxide
HAP Hazardous Air Pollutant	SSM Startup, Shutdown & Malfunction
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	
m/s meters per second	