

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: 092020-004 Project Number: 2020-02-002
Installation ID: 061-0035

Parent Company: Grand River Hutterian Brethren, Inc.

Parent Company Address: 20282 State Highway K, Gallatin, Missouri 64640

Installation Name: Jamesport Concrete, LLC

Installation Address: 20282 State Highway K, Gallatin, Missouri 64640

Location Information: Daviess County, S25, T60N, R27W

Application for Authority to Construct was made for:

A truck mix concrete plant with a capacity of 94 tons per hour. 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

September 8, 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/>

SITE SPECIFIC 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 (3)(E). "Conditions required by permitting authority."

1. Undocumented Watering Requirement
Jamesport Concrete, LLC shall apply a water spray on all haul roads and vehicular activity areas whenever conditions exist that would allow visible emissions from these sources to leave the property.

2. Control Device Requirement-Baghouse
 - A. Jamesport Concrete, LLC shall control emissions from the using a baghouse as specified in the permit application.
 - 1) Cement Silo (EP-03)
 - 2) Supplement Silo (EP-04)
 - 3) Weigh Hopper (EP-05)
 - 4) Truck Mix Load-out (EP-06)

 - B. The baghouse 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 baghouse 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. Jamesport Concrete, LLC shall monitor and record the operating pressure drop across the baghouse at least once every 24 hours when the associated equipment is in operation. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.

 - E. Jamesport Concrete, LLC shall maintain a copy of the baghouse manufacturer's performance warranty on site.

 - F. Jamesport Concrete, LLC shall maintain an operating and maintenance log for the baghouse which shall include the following:
 - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and

SITE SPECIFIC 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.

3. Fuel Requirement
Jamesport Concrete, LLC shall exclusively combust propane in the boiler (EU-02) during concrete production.

4. Concurrent Operation Restriction
Jamesport Concrete, LLC is prohibited from operating with any other plants that have ambient impact limits based on the Air Pollution Control Program's nomographs.

5. Record Keeping Requirement
Jamesport Concrete, LLC shall maintain all records required by this permit for not less than five years and make them available to any Missouri Department of Natural Resources' personnel upon request.

6. Reporting Requirement
Jamesport Concrete, LLC shall report to the Air Pollution Control Program, Compliance / Enforcement Section by mail to P.O. Box 176, Jefferson City, MO 65102 or by email at AirComplianceReporting@dnr.mo.gov, no later than 10 days after any exceedances of the limitations imposed by this permit.

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

Project Number: 2020-02-002
Installation ID Number: 061-0035
Permit Number: 092020-004

Jamesport Concrete, LLC:
20282 State Highway K
Gallatin, Missouri 64640

Complete: April 13, 2020

Parent Company:
Grand River Hutterian Brethren, Inc.
20282 State Highway K
Gallatin, Missouri 64640

Daviess County, S25, T60N, R27W

PROJECT DESCRIPTION

The Grand River Hutterian Brethren, Inc. has applied for the Authority to Construct a stationary truck-mix concrete plant capable of producing 94 tons of concrete per hour. The plant will be located at 20282 State Highway K in Gallatin, Missouri, Daviess County. Power will be supplied to the plant by the local utility from the grid. A propane fired boiler, EU-10, rated at 1.2 MMBtu per hour will supply the hot water for the concrete plant. A baghouse will be used to control the particulate (PM, PM₁₀, and PM_{2.5}) emissions from the cement silo (EU-03), the supplement silo (EU-04), the weigh hopper (EU-05) and the truck mix load-out (EU-06). Undocumented watering will be used to control fugitive dust from the haul roads (EU-9).

This installation is located in Daviess County, an attainment area for all criteria pollutants.

This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].

No permits have been issued to Jamesport Concrete, LLC from the Air Pollution Control Program.

TABLES

Table 1, below, is a list of the emission units associate with the truck-mix concrete plant.

Table 1: Equipment List

Emission Unit	Description	MHDR
EU-01	Aggregate Transfer	43.6 tph
EU-02	Sand Transfer	33.4 tph
EU-03	Cement Unloading to Silo	11.5 tph
EU-04	Supplement Unloading to Silo	1.7 tph
EU-05	Weigh Hopper	90.1 tph
EU-06	Truck Loading	13.2 tph
EU-07a	Aggregate Storage Pile – Load-in	43.6 tph

Emission Unit	Description	MHDR
EU-07b	Aggregate Storage Pile – Load-out	43.6 tph
EU-07c	Aggregate Storage Pile - Vehicular Activity	0.237 VMT
EU-07d	Aggregate Storage Pile – Wind Erosion	0.35 Acres
EU-11	Sand Storage Pile – Load-in	33.4 tph
EU-12	Sand Storage Pile – Load-out	33.4 tph
EU-13	Sand Storage Pile – Vehicular Activity	0.237 VMT
EU-14	Sand Storage Pile – Wind Erosion	0.2 Acres
EU-15	Haul Road	0.783 VMT
EU-01	Propane Boiler	1.2 MMBtu

Table 2, summarizes the emissions of this project. The potential emissions of the process equipment exclude emissions from haul roads and wind erosion. The existing actual emissions were taken from the previous year's EIQ. The potential emissions of the application represent the emissions of all equipment and activities assuming continuous operation (8760 hours per year).

Table 2: Emissions Summary (tons per year)

Air Pollutant	De Minimis Level/SMAL	^a Potential Emissions of Process Equipment	Existing Actual Emissions	^b Potential Emissions of the Project
PM	25.0	1.78	N/A	24.40
PM ₁₀	15.0	0.77	N/A	7.87
PM _{2.5}	10.0	0.52	N/A	1.44
SO _x	40.0	0.00	N/A	0.09
NO _x	40.0	0.00	N/A	1.09
VOC	40.0	0.00	N/A	0.03
CO	100.0	0.00	N/A	0.43
GHG (CO _{2e})	N/A	0.00	N/A	731.44
GHG (mass)	N/A	0.00	N/A	728.54
Total HAPs	25.0	0.00	N/A	0.01

N/A = Not Applicable; N/D = Not Determined

^a Emissions solely from process equipment

^b Includes site specific haul road, storage pile emissions, and propane boiler

EMISSIONS CALCULATIONS

Emissions for the project were calculated as described below and using emission factors found in the United States EPA document AP-42 *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources*, Fifth Edition (AP-42).

Emissions from the concrete batch plant:

- Calculated using emission factors from AP-42 Section 11.12 “Concrete Batching,” June 2006.
- This section cites Equation (1) in Section 13.2.4 “Aggregate Handling and Storage Piles,” November 2006 for calculating the emissions from aggregate and sand transfer.
- The cement and supplement silos are controlled with baghouses, so the controlled emission factors were used.

Emissions from the aggregate weigh hopper:

- Calculated using AP-42 Section 13.2.4, Equation (1).
- These emissions are controlled by a baghouse so a 99% control factor was applied to the calculation.
- Emissions from mixer loading are controlled by a shroud vented to a baghouse, so the controlled emission factor was used.

Emissions from aggregate handling:

- Calculated using emission factors from AP-42 Section 11.19.2 “Crushed Stone Processing and Pulverized Mineral Processing,” August 2004.
- The uncontrolled emission factors were used because the inherent moisture content of the crushed rock is less than 0.7% by weight.

Emissions from the combustion of LPG for the boiler:

- Calculated using emission factors from AP-42 Section 1.5 “Liquefied Petroleum Gas Combustion”, July 2008.

Emissions from haul roads and vehicular activity areas:

- Calculated using the predictive equation from AP-42 Section 13.2.2 “Unpaved Roads,” November 2006.
- A 50% control efficiency for PM and PM₁₀ and a 41% control efficiency for PM_{2.5} were applied to the emission calculations for the use of undocumented watering.

Emissions from storage piles:

- Load-in and load-out of storage piles were calculated using the predictive equation from AP-42 Section 13.2.4.
- The moisture content of the aggregate is 0.7% by weight.
- Emissions from wind erosion of storage piles were calculated using an equation found in the Air Pollution Control Program’s Emissions Inventory Questionnaire Form 2.8 “Storage Pile Worksheet.”

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 criteria pollutants are below *de minimis* levels.

APPLICABLE REQUIREMENTS

Jamesport Concrete, 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

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110.
- No Operating Permit is required for this installation because all emissions of criteria pollutants are below *de minimis* levels.
- *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

- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPS) or National Emission Standards for Hazardous Air Pollutants for Source Categories (MACTS) apply to the proposed equipment.
- *Control of Sulfur Dioxide Emissions*, 10 CSR 10-6.261

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 January 31, 2020, received February 5, 2020, designating Grand River Hutterian Brethren, Inc. as the owner and operator of the installation.

APPENDIX A

Abbreviations and Acronyms

% percent	MMBtuMillion British thermal units
°F degrees Fahrenheit	MMCFmillion cubic feet
acfm actual cubic feet per minute	MSDSMaterial Safety Data Sheet
BACT Best Available Control Technology	NAAQSNational Ambient Air Quality Standards
BMPs Best Management Practices	NESHAPs ..National Emissions Standards for Hazardous Air Pollutants
Btu British thermal unit	NO_xnitrogen oxides
CAM Compliance Assurance Monitoring	NSPSNew Source Performance Standards
CAS Chemical Abstracts Service	NSRNew Source Review
CEMS Continuous Emission Monitor System	PMparticulate matter
CFR Code of Federal Regulations	PM_{2.5}particulate matter less than 2.5 microns in aerodynamic diameter
CO carbon monoxide	PM₁₀particulate matter less than 10 microns in aerodynamic diameter
CO₂ carbon dioxide	ppmparts per million
CO_{2e} carbon dioxide equivalent	PSD Prevention of Significant Deterioration
COMS Continuous Opacity Monitoring System	PTEpotential to emit
CSR Code of State Regulations	RACTReasonable Available Control Technology
dscf dry standard cubic feet	RALRisk Assessment Level
EQ Emission Inventory Questionnaire	SCCSource Classification Code
EP Emission Point	scfmstandard cubic feet per minute
EPA Environmental Protection Agency	SDSSafety Data Sheet
EU Emission Unit	SICStandard Industrial Classification
fps feet per second	SIPState Implementation Plan
ft feet	SMALScreening Model Action Levels
GACT Generally Available Control Technology	SO_xsulfur oxides
GHG Greenhouse Gas	SO₂sulfur dioxide
gpm gallons per minute	SSMstartup, shutdown, & malfunction
gr grains	tphtons per hour
GWP Global Warming Potential	tpytons per year
HAP Hazardous Air Pollutant	VMT vehicle miles traveled
hr hour	VOC Volatile Organic Compound
hp horsepower	
lb pound	
lbs/hr pounds per hour	
MACT Maximum Achievable Control Technology	
µg/m³ micrograms per cubic meter	
m/s meters per second	
Mgal 1,000 gallons	
MW megawatt	
MHDR maximum hourly design rate	



Missouri Department of dnr.mo.gov

NATURAL RESOURCES

Michael L. Parson, Governor

Carol S. Comer, Director

September 8, 2020

Jesse Wurtz
Manager
Jamesport Concrete, LLC
20282 State Highway K
Gallatin, Missouri 64640

RE: New Source Review Permit Number:
Project Number: 2020-02-002; Installation Number: 061-0035

Dear Jesse Wurtz:

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 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

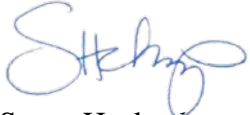


Jesse Wurtz
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If you have any questions regarding this, please do not hesitate to contact Russell Osborne, at the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

A handwritten signature in blue ink, appearing to read "S. Heckenkamp".

Susan Heckenkamp
New Source Review Unit Chief

SH:roa

Enclosures

c: Kansas City Regional Office
PAMS File: 2020-02-002

Permit Number: 092020-004