



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Mike Kehoe
Governor

Kurt U. Schaefer
Director

March 12, 2025

Duane Mueller
Environmental Manager
Magruder Paving LLC - PORT-0658
255 Watson Road
Troy, MO 63379

RE: Portable Source Relocation Request for PORT-0658
Project Number: 2025-03-002; Permit Number: 032010-001AK

Dear Duane Mueller:

This letter authorizes you to relocate your portable asphalt plant from its present location in Miller County S35, T42N, R15W, to Magruder Paving - Wright City in Warren County S21, T47N, R1W. Authority to operate at your new site is contingent on the following conditions:

- The equipment shall be operated and maintained in accordance with your existing permit.
- The equipment shall be operated in accordance with the attached site-specific conditions.
- The permittee shall notify the St. Louis Regional Office of equipment start-up within fifteen days after beginning operation at the new site.
- Authority to operate at this site expires on April 1, 2026.
- PORT-0658 cannot operate with any other plants that have ambient impact limits based on the Air Pollution Control Program's nomographs. Please refer to the permits of any plant that you are operating with to see if their respective permits contain an ambient impact limit.

Upon moving to this site, authority to operate at the previous site expires. Permission to return to a previously authorized site will be granted if circumstances at the site have not been changed since receiving the initial approval for the site and you submit a Portable Source Relocation Request form to the Air Pollution Control Program at least seven days before the planned relocation. The relocation request must include written notification of any concurrently operating plants. If you choose not to relocate your plant to this site, please notify the Air Pollution Control Program. Once the project is complete, authority to operate at this site expires. If the project is delayed beyond the expiration, you may request an extension in writing at least 60 days before the expiration date. The portable plant is not authorized to relocate back to this site without submitting a new Portable Source Relocation Request form at least 21 days before the planned relocation as if the site was new.

A copy of this letter and your permit must be kept on-site with the plant and be made available to the Department of Natural Resources' personnel upon request.



Duane Mueller
Page Two

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: <https://ahc.mo.gov>

If we can be of further assistance, please contact Tanner Bollmann at the department's Air Pollution Control Program, P.O. Box 176 Jefferson City, MO 65102 or you may telephone (573) 751 - 4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

A handwritten signature in blue ink that reads "Kendall B. Hale". The signature is written in a cursive, flowing style.

Kendall B. Hale
Permits Section Chief

KBH:bth

Enclosures

c: St. Louis Regional Office
PAMS File: 2025-03-002

Page No.	3
Permit No.	032010-001AK
Project No.	2025-03-002

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."

PORT ID Number: PORT-0658

Site Name: Magruder Paving - Wright City

Site Address: 50 Roelker Road, Wright City, MO 63390

Site County: Warren County S21, T47N, R1W

1. Annual PM₁₀ Emission Limit
 - A. The permittee shall emit less than 15.0 tons of PM₁₀ in any consecutive 12-month period from PORT-0658 and associated haul roads and storage piles while operating at this site. 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*.
 - B. The permittee shall demonstrate compliance with Special Condition 1.A using Attachment A or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.
2. Best Management Practices (BMPs) Requirement

The permittee shall control fugitive emissions from all of the haul roads and vehicular activity areas at this site by performing Best Management Practices as defined in Attachment B.
3. Moisture Content Testing Requirement
 - A. The permittee shall verify through testing that the moisture content of the processed rock is greater than or equal to 1.5 percent by weight.
 - B. Testing shall be conducted according to the method prescribed by the American Society for Testing Materials (ASTM) D-2216, C-566 or another method approved by the Director.
 - C. The initial test shall be conducted no later than 45 days after the start of operation. A second test shall be performed the calendar year following the initial test during the months of July or August.

Page No.	4
Permit No.	032010-001AK
Project No.	2025-03-002

SPECIAL CONDITIONS:

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

- D. The test samples shall be taken from rock that has been processed by the plant or from each source of aggregate (e.g. each quarry).
 - E. The written analytical report shall include the raw data and moisture content of each sample, the test date and the original signature of the individual performing the test. The report shall be filed on-site or at the permittee's main office within 30 days of completion of the required test.
 - F. If the moisture content of either of the two tests is less than the moisture content in Special Condition 3.A, another test may be performed with 15 days of the noncompliant test. If the results of that test are also less than the limit, the permittee shall either:
 - 1) Apply for a new permit to account for the revised information, or
 - 2) Submit a plan for the installation of wet spray devices to the Compliance/Enforcement Section of the Air Pollution Control Program section within 10 days of the second noncompliant test. Plans may be sent by mail to P.O. Box 176, Jefferson City, MO 65102 or by email at AirComplianceReporting@dnr.mo.gov. The wet spray devices shall be installed and operational within 40 days of the second noncompliant test.
 - G. In lieu of testing, the permittee may obtain test results from the supplier of the aggregate that demonstrate compliance with the moisture content in special condition 3.A.
4. Control Device Requirement – Baghouse
- A. The permittee shall control emissions from the Asphalt Drum Dryer (EP-4) using the baghouse as specified in the permit application.
 - 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. This gauge or meter shall be located such that the Department of Natural Resources' employees may easily observe it.
 - C. The permittee shall monitor and record the operating pressure drop across the baghouse at least once every 24 hours when the plant is in operation. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty, which shall be kept on site.

Page No.	5
Permit No.	032010-001AK
Project No.	2025-03-002

SPECIAL CONDITIONS:

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

- D. 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 (e.g. extreme temperature, acidic and alkali conditions, abrasive particulate).
 - E. The permittee shall maintain an operating and maintenance log for the baghouse, which shall include the following:
 - 1) Incidents of malfunction with impact on emissions, date and duration of event, probable cause, and corrective actions
 - 2) Maintenance activities with inspection schedule, repair actions, replacements, etc.
5. Fuel Requirement
- A. The permittee shall burn exclusively ultra-low sulfur diesel with a sulfur content less than or equal to 0.0015 wt% (15 parts per million by weight) in the drum dryer (EU-4).
 - B. The permittee shall burn exclusively ultra-low sulfur diesel with a sulfur content less than or equal to 0.0015 wt% (15 parts per million by weight) in their asphalt heater (EU-7).
 - C. The permittee shall demonstrate compliance with Special Condition 5.A. and 5.B. by obtaining records of the fuel's sulfur content from the vendor for each shipment of fuel received or by testing each shipment of fuel for the sulfur content in accordance with the method described in 10 CSR 10-6.040 Reference Methods.
 - D. The permittee shall keep the records required by Special Condition 5.C with the unit and make them available for Department of Natural Resources' employees upon request.
6. Nonroad Engine Requirements
- The permittee cannot operate at this site longer than 12 consecutive months in order to avoid recordkeeping showing the movement of the engine. To meet the definition of a nonroad engine as stated in 40 CFR 1068.30, the engine cannot remain in one physical location for longer than 12 consecutive months.

Page No.	6
Permit No.	032010-001AK
Project No.	2025-03-002

SPECIAL CONDITIONS:

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

7. Record Keeping and Reporting Requirement
 - A. The permittee 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.
 - B. The permittee shall report to the Air Pollution Control Program, Compliance/Enforcement Section at P.O. Box 176, Jefferson City, MO 65102 **and** AirComplianceReporting@dnr.mo.gov, no later than ten days after any exceedances of the limitations imposed by this permit.

**Technical Review
Magruder Paving LLC - PORT-0658
PORT-0658
Project: 2025-03-002
Permit: 032010-001AK**

PROJECT DESCRIPTION

Magruder Paving LLC - PORT-0658 is relocating their portable asphalt plant from its present location in Miller County, S35, T42N, R15W to Wright City in Warren County, S21, T47N, R1W. PORT-0658 has a maximum design rate of 400 tons per hour. There are 1.5 acres of storage piles and two haul roads for delivery of raw materials and shipping asphaltic concrete. The receiving haul road is 1,720 feet long and the shipping haul road is 1,620 feet long. The drum dryer is equipped with a 120 MMBtu/hr burner and is powered by ultra-low sulfur diesel with a sulfur content less than or equal to 0.0015% by weight. The asphalt heater is rated at 3.5 MMBtu/hr and is powered by ultra-low sulfur diesel with a sulfur content less than or equal to 0.0015% by weight. Particulate emissions from the drum dryer are controlled by a baghouse.

The permittee is using one of the methods described in Attachment B, "Best Management Practices," to control emissions from haul roads and vehicular activity areas.

The portable plant is moving to this site to complete MODOT highway and commercial projects. There are no stationary plants located at this site.

The plant will be powered by a diesel engine; however, it meets the definition of nonroad engine as defined in 40 CFR Part 1068.30. Therefore, the emissions of the engine were not included in the project emissions.

TABLES

Table 1 summarizes the emissions of this project. The potential emissions of process equipment exclude emissions from haul roads and storage piles, which are site specific. The existing actual emissions were taken from the portable plant's most recent full Emissions Inventory Questionnaire (EIQ). The potential emissions of the application represent the emissions of all equipment and activities assuming continuous operation (8760 hours per year). Conditioned potential emissions account for a voluntary de minimis PM₁₀ limit of 15.0 tons per year to avoid the dispersion modeling requirements found in 10 CSR 10.6.060 Section (5).

Table 1: Emissions Summary (tons per year)

Pollutant	De Minimis Level	Existing Actual Emissions (2024 EIQ)	Potential Emissions of Process Equipment ^a	Potential Emissions of the Application ^b	Conditioned Potential Emissions ^c
PM	25.0	N/D	67.70	244.46	35.83
PM ₁₀	15.0	1.84	46.04	102.34	<15.00
PM _{2.5}	10.0	1.43	42.43	55.83	8.18
SO _x	40.0	24.57	0.47	0.47	0.07
NO _x	40.0	9.42	93.63	93.63	13.72
VOC	40.0	1.80	105.65	105.65	15.49
CO	100.0	7.84	31.35	31.35	4.60
Formaldehyde	10.0/2.0 ^d	N/D	5.74	5.74	0.84
Lead Compounds	10.0/0.01 ^d	0.00	0.03	0.03	0.00
Total HAPs	25.0	0.01	16.00	16.00	2.35

N/D = Not Determined

^a Excludes site specific haul road and storage pile emissions

^b Includes site specific haul road and storage pile emissions

^c De minimis limit to avoid the dispersion modeling requirements found in 10 CSR 10.6.060 Section (5)

EMISSION CALCULATIONS

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

- Emissions from the drum mix asphalt plant were calculated using emission factors from AP-42, Section 11.1 *Hot Mix Asphalt Plants* (April 2004). Sulfur oxide (SO_x) emissions were calculated using the SO₂ and SO₃ emission factors from AP-42, Section 1.3 *Fuel Oil Combustion* (September 1998) and assuming half of the sulfur up to 0.1 pound per ton of product is absorbed into the product. The asphalt plant is controlled by a baghouse, so the fabric filter-controlled emission factor was used to calculate PM, PM₁₀, and PM_{2.5} emissions. Emissions from plant load-out were calculated using predictive equations found in AP-42 Table 11.1-14. Default values were used for asphalt volatility and mix temperature. Emissions from the asphalt heater were calculated using emission factors from AP-42, Section 1.4. Emissions from aggregate handling were calculated using emission factors from AP-42, Section 11.19.2 *Crushed Stone Processing and Pulverized Mineral Processing* (August 2004). The controlled emission factors were used because the inherent moisture content of the crushed rock is greater than 1.5% by weight.
- 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). A 90% control efficiency for PM and PM₁₀ and a 74%

control efficiency for PM_{2.5} are applied to the emission calculations for the use of BMPs.

- PM, PM₁₀, and PM_{2.5} emissions from load-in and load-out of storage piles were calculated using the predictive equation from AP-42, Section 13.2.4 *Aggregate Handling and Storage Piles* (November 2006). The moisture content of the aggregate is greater than 1.5% by weight. PM, PM₁₀, and PM_{2.5} 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."

The engine emissions were not evaluated for this review as the diesel engine at this site is classified as a nonroad engine. 40 CFR 63 Subpart ZZZZ, "National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" and 40 CFR 60 Subpart IIII, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" do not apply. However, if the plant were to remain in one location for longer than 12 consecutive months, it would not be in compliance with this permit because engine emissions were not evaluated. It may also not be in compliance with MACT ZZZZ or NSPS IIII. The nonroad engine, as defined in 40 CFR 1068.30, is subject to further applicable requirements in 40 CFR 1039 which is outside the purview of this program.

Permit Number: 032010-001AK

Site County: Warren County, S21, T47N, R1W

(Month, Day Year)

[illegible]

¹ Multiply the monthly production by the emission factor.

² Write the startup, shutdown and malfunction emissions (SSM) in tons including any excess emissions as reported to the Air Pollution Control Program's Enforcement/Compliance Section according to the provisions of 10 CSR 10-6.050 for the month

³ Divide the monthly emissions (lbs) by 2000 and add the SSM Emissions.

⁴ Add the monthly emissions (tons) to the sum of the monthly emissions from the previous eleven months. A total of **less than 15.0 tons** of PM₁₀ per 12 consecutive months is necessary for compliance.

Attachment B: Best Management Practices

Haul roads and vehicular activity areas shall be maintained in accordance with at least one of the following options when the portable plant is operating.

1. Pavement

- A. The operator shall pave the area with materials such as asphalt, concrete or other materials approved by the Air Pollution Control Program. The pavement will be applied in accordance with industry standards to achieve control of fugitive emissions¹ while the plant is operating.
- B. Maintenance and repair of the road surface will be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas while the plant is operating.
- C. The operator shall periodically wash or otherwise clean all of the paved portions of the haul roads as necessary to achieve control of fugitive emissions from these areas while the plant is operating.

2. Application of Chemical Dust Suppressants

- A. The operator shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to unpaved areas.
- B. The quantities of the chemical dust suppressant shall be applied and maintained in accordance with the manufacturer's recommendation (if available) and in sufficient quantities to achieve control of fugitive emissions from these areas while the plant is operating.
- C. The operator shall record the time, date and the amount of material applied for each application of the chemical dust suppressant agent on the above areas. The operator shall keep these records with the plant for not less than five (5) years and make these records available to Department of Natural Resources' personnel upon request.

3. Application of Water-Documented Daily

- A. The operator shall apply water to unpaved areas. Water shall be applied at a rate of 100 gallons per day per 1,000 square feet of unpaved or untreated surface area while the plant is operating.
- B. Precipitation may be substituted for watering if the precipitation is greater than one quarter of one inch and is sufficient to control fugitive emissions.
- C. Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads.
- D. The operator shall record the date and volume of water application or the amount of precipitation that day. The operators shall also record the rational for not watering (e.g. freezing conditions or not operating).
- E. The operator shall keep these records with the plant for not less than five (5) years, and the operator shall make these records available to Department of Natural Resources' personnel upon request.

¹ For purposes of this document, Control of Fugitive Emissions means to control particulate matter that is not collected by a capture system and visible emissions to the extent necessary to prevent violations of the air pollution law or regulation. (Note: control of visible emission is not the only factor to consider in protection of ambient air quality.)