

Missouri Department of dnr.mo.gov

# NATURAL RESOURCES

Michael L. Parson, Governor

Carol S. Comer, Director

October 23, 2020

Lina Klein  
Environmental Director  
Fred Weber, Inc. - Portable Ballast Plant #2  
2320 Creve Coeur Mill Road  
Maryland Heights, MO 63043

RE: New Source Review Permit - Project Number: 2020-09-034

Dear Lina Klein:

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. In addition, please note that Fred Weber, Inc. - Portable Ballast Plant #2 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. 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



Lina Klein  
Page Two

mail, it will be deemed filed on the date it is received by the administrative hearing commission, whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: [www.oa.mo.gov/ahc](http://www.oa.mo.gov/ahc).

If you have any questions regarding this permit, please do not hesitate to contact Jared Rhodes, 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



Susan Heckenkamp  
New Source Review Unit Chief

SH:sha

Enclosures

c: St. Louis Regional Office Regional Office  
PAMS File: 2020-09-034

Permit Number: 102020-008



**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: 102020-008 Project Number: 2020-09-034  
Installation ID: PORT-0739

Parent Company: Fred Weber, Inc.

Parent Company Address: 2320 Creve Coeur Mill Road, Maryland Heights, MO 63043

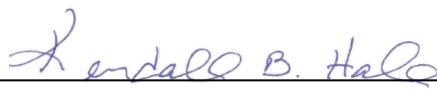
Installation Name: Fred Weber, Inc. - Portable Ballast Plant #2

Installation Address: 838 VFW Drive, Festus, MO 63028

Location Information: Jefferson County, S16 T4N R6E

Application for Authority to Construct was made for:  
The modification of PORT-0739 by adding a secondary screen and associated conveyors. 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

\_\_\_\_\_  
October 23, 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/>

**GENERAL SPECIAL CONDITIONS:**

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

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*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."*

1. Equipment Identification Requirement

The permittee shall maintain easily read permanent markings on the crushers, screens, and conveyors of the plant as listed in Table 1 of this permit. These markings shall be the equipment's serial number or a company assigned identification number that uniquely identifies the individual component. These identification numbers must be submitted to the Air Pollution Control Program no later than 15 days after start-up of the portable rock crushing plant.

2. Relocation of Portable Rock Crushing Plant

A. The portable plant covered under this permit shall not be operated at any location longer than 24 consecutive months except if the Site Specific Special Conditions of this portable plant contain a nonroad engine requirement which limits the portable plant at the site specific location to 12 consecutive months.

B. A complete "Portable Source Relocation Request" application must be submitted to the Air Pollution Control Program prior to any relocation of this portable rock crushing plant.

1) If the portable rock crushing plant is moving to a site previously permitted, and if the circumstances at the site have not changed, then the application must be received by the Air Pollution Control Program at least seven days prior to the relocation.

2) If the portable rock crushing plant is moving to a new site, or if circumstances at the site have changed (e.g. the site was only permitted for solitary operation and now another plant is located at the site), then the application must be received by the Air Pollution Control Program at least 21 days prior to the relocation. The application must include written notification of any concurrently operating plants.

3. Record Keeping Requirement

The permittee shall maintain all records required by this permit for not less than five years and shall make them available to any Missouri Department of Natural Resources' personnel upon request.

4. Reporting Requirement

The permittee shall report to the Air Pollution Control Program Compliance/Enforcement Section by mail at P.O. Box 176, Jefferson City, MO 65102 or by e-mail at [AirComplianceReporting@dnr.mo.gov](mailto:AirComplianceReporting@dnr.mo.gov), no later than 10 days after any exceedances of the limitations imposed by this permit.

**SITE SPECIFIC SPECIAL CONDITIONS:**

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

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*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-0739

Site ID Number: 099-0008

Site Name: Festus Stone

Site Address: 838 VFW Drive, Festus, MO 63028

Site County: Jefferson S16 T4N R6E

1. Superseding Condition

The conditions of this permit supersede all site-specific special conditions found in the previously issued construction permit 072016-005A from the Air Pollution Control Program.

2. Annual PM<sub>10</sub> Emission Limit

A. The permittee shall emit less than 15.0 tons of PM<sub>10</sub> in any consecutive 12-month rolling period from the entire portable plant, which consists of the equipment listed in Table 1 of this permit. The permittee shall include all actual emissions in the limit including SSM emissions as well as any excess 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 2.A using Attachment A or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.

3. Undocumented Watering Requirement

The permittee 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.

4. Primary Equipment Requirement

The permittee shall process all rock through the primary crusher (EP-02). Bypassing the primary crusher is prohibited.

5. Nonroad Engine Requirement

The permittee shall not operate the portable plant, 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 89.2, engines cannot remain in one physical location for longer than 12 consecutive months.

**SITE SPECIFIC SPECIAL CONDITIONS:**

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

6. Record Keeping Requirement

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.

7. Reporting Requirement

The permittee 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](mailto: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: 2020-09-034  
Installation ID Number: PORT-0739  
Permit Number: 102020-008

Fred Weber, Inc. - Portable Ballast Plant #2:  
838 VFW Drive  
Festus, MO 63028

Complete: September 30, 2020

Parent Company:  
Fred Weber, Inc.  
2320 Creve Coeur Mill Road  
Maryland Heights, MO 63043

Jefferson County, S16 T4N R6E

PROJECT DESCRIPTION

Fred Weber, Inc. submitted an Application for Authority to Construct to modify PORT-0739 originally permitted in permit 072016-005. The portable plant modification consists of adding a secondary screen and associated conveyors. The plant retains its 500 tons per hour rating and is currently operating at the Festus Stone quarry in Festus, MO. Authority to operate at Festus Stone quarry was granted by permit 072016-005A and expires on February 28, 2021. This plant will consist of the emission sources listed in Table 1.

Table 1: Plant Emission Points Summary

| Emission Point | Description                        | MHDR     |
|----------------|------------------------------------|----------|
| EP1            | Loading from pit to plant (loader) | 500 tph  |
| EP2            | Primary Crusher                    | 500 tph  |
| EP3            | Conveyor C1                        | 500 tph  |
| EP4            | Conveyor C2                        | 500 tph  |
| EP5            | Primary 8x20 3D Screen             | 500 tph  |
| EP6            | Conveyor C3                        | 275 tph  |
| EP7            | Secondary Crusher                  | 275 tph  |
| EP8            | Conveyor C4                        | 275 tph  |
| EP9            | Conveyor C5                        | 500 tph* |
| EP10           | Conveyor C6                        | 500 tph* |
| EP11           | Conveyor C7                        | 500 tph* |
| EP12           | Conveyor C8                        | 500 tph* |
| EP13           | Conveyor C9                        | 500 tph* |
| EP14           | Conveyor C10                       | 500 tph* |
| EP15           | Conveyor C11                       | 275 tph* |
| EP16           | Conveyor C12                       | 275 tph* |



| Emission Point | Description                     | MHDR          |
|----------------|---------------------------------|---------------|
| EP17           | Conveyor C13                    | 275 tph*      |
| EP18           | Secondary 8x20 3D Screen        | 275 tph       |
| EP19           | Conveyor C14                    | 275 tph*      |
| EP20           | Conveyor C15                    | 275 tph*      |
| EP21           | Conveyor C16                    | 275 tph*      |
| EP22           | Haul Roads                      | Site Specific |
| EP25a          | Storage pile vehicular activity | Site Specific |
| EP25b          | Storage pile wind erosion       | Site Specific |
| EP25c          | Storage pile loadout            | 500 tph       |

\*Actual throughput split between multiple conveyors for PTE calculation purposes.

The plant is powered by a diesel engine, however it meets the definition of nonroad engine as defined in 40 CFR 89.2(1)(i). Therefore, the emissions of the engine were not included in the project emissions.

This installation is located in the part of Jefferson County that is a nonattainment area for the 2010 SO<sub>2</sub> standard and an attainment/unclassifiable area for all other criteria pollutants. This installation is located in a maintenance area for the 2008 ozone standard.

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 for all pollutants, except SO<sub>2</sub> which is 100 tons per year, and fugitive emissions are not counted toward major source applicability.

The table below summarizes the emissions of this project. The potential emissions of the process equipment at Festus Stone quarry, which excluded emissions from haul roads and wind erosion, are site specific and may vary from site to site depending on moisture content and associated emissions control efficiency. The existing actual emissions were taken from the portable plants most recent full EIQ. The potential emissions of the application represent the emissions of all equipment, haul roads, and storage piles assuming continuous operation (8760 hours per year). The conditioned potential emissions include emissions from sources that will limit their production to ensure compliance with the voluntary annual emission limit taken to avoid dispersion modeling requirements found in 10 CSR 10-6.060 Section (5).

Table 2: Emissions Summary (tons per year)

| Air Pollutant     | De Minimis Level/SMAL | Potential Emissions of the Process Equipment | Existing Actual Emissions (2016 EIQ) | Potential Emissions of the Application | Conditioned Potential Emissions |
|-------------------|-----------------------|----------------------------------------------|--------------------------------------|----------------------------------------|---------------------------------|
| PM                | 25.0                  | 136.7                                        | N/D                                  | 896.0                                  | 48.5                            |
| PM <sub>10</sub>  | 15.0                  | 50.0                                         | 0.9                                  | 276.9                                  | <15.0                           |
| PM <sub>2.5</sub> | 10.0                  | 7.0                                          | 0.4                                  | 37.0                                   | 2.0                             |
| SO <sub>x</sub>   | 40.0                  | N/A                                          | N/A                                  | N/A                                    | N/A                             |
| NO <sub>x</sub>   | 40.0                  | N/A                                          | N/A                                  | N/A                                    | N/A                             |
| VOC               | 40.0                  | N/A                                          | N/A                                  | N/A                                    | N/A                             |

| Air Pollutant | De Minimis Level/SMAL | Potential Emissions of the Process Equipment | Existing Actual Emissions (2016 EIQ) | Potential Emissions of the Application | Conditioned Potential Emissions |
|---------------|-----------------------|----------------------------------------------|--------------------------------------|----------------------------------------|---------------------------------|
| CO            | 100.0                 | N/A                                          | N/A                                  | N/A                                    | N/A                             |
| Total HAPs    | 25.0                  | N/A                                          | N/A                                  | N/A                                    | N/A                             |

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

## 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 rock-crushing equipment:

- 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 no emission controls were used on the equipment and there are no permit conditions requiring the monitoring of aggregate moisture content.

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 PM<sub>10</sub> and a 41% control efficiency for PM<sub>2.5</sub> were applied to the emission calculations for the use of undocumented watering.
- Calculated using the predictive equation from AP-42 Section 13.2.1 “Paved Roads,” January 2011.

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 “Aggregate Handling and Storage Piles,” November 2006.
- A 0.7% by weight moisture content of the aggregate was used.
- 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.”

## OPERATING SCENARIOS

The portable plant covered under this permit shall not operate with other plants that have ambient impact limits based on the Air Pollution Control Program’s nomographs. When locating to a site that has or will have other plants, refer to that plant’s permit special conditions.

## 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 PM<sub>10</sub> are conditioned to de minimis levels. Potential emissions of PM are above de minimis levels, but below major levels.

## APPLICABLE REQUIREMENTS

The portable plant covered under this permit 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.
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

### SPECIFIC REQUIREMENTS

- 40 CFR 60 Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants" applies to the equipment.
- 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.

## 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 28, 2020, received September 28, 2020, designating Fred Weber, Inc. as the owner and operator of the installation.

