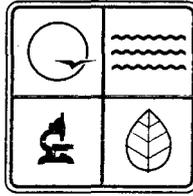


STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES  
MISSOURI AIR CONSERVATION COMMISSION

PERMIT BOOK



## 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: **102007-013**

Project Number: **2007-08-083**  
**PORT-0587**

Owner: **Fred Weber, Inc.**

Owner's Address: **2320 Creve Coeur Mill Road, Maryland Heights, MO 63043**

Installation Name: **Fred Weber, Inc. (Concrete Batch Plant #9)**

Installation Address: **Route 1, Box 112, Annapolis, MO 63620**

Location Information: **Reynolds County, S15, T33N, R2E**

Application for Authority to Construct was made for:

The modification of an existing portable concrete plant to extend haul road distance. Concrete is produced through a Central Mix process. The portable concrete plant has a maximum hourly design rate (MHDR) of 720 tons per hour (tph). Best Management Practices will be used to control fugitive emissions from haul roads and storage piles. This review was conducted in accordance with Section (6), 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 (listed as attachments starting on page 2) are applicable to this permit.

**OCT 23 2007**

EFFECTIVE DATE

  
DIRECTOR OR DESIGNEE  
DEPARTMENT OF NATURAL RESOURCES

## 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 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.** Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources 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 this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed Special Conditions as provided in RSMo 643.075. If you choose to appeal, the Air Pollution Control Program must receive your written declaration within 30 days of receipt of this permit.

If you choose not to appeal, this certificate, the project review, 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 Department of Natural Resources has established the Outreach and Assistance Center to help in completing future applications or fielding complaints about the permitting process. You are invited to contact them at 1-800-361-4827 or (573) 526-6627, or in writing addressed to Outreach and Assistance Center, P.O. Box 176, Jefferson City, MO 65102-0176.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention Construction Permit Unit.

2007-08-083  
PORT-0587

Fred Weber, Inc.

2320 Creve Coeur Mill Road, Maryland Heights, MO 63043

Fred Weber, Inc. (Concrete Batch Plant #9)

Route 1, Box 112, Annapolis, MO 63620

Reynolds County, S15, T33N, R2E

The modification of an existing portable concrete plant to extend haul road distance. Concrete is produced through a Central Mix process. The portable concrete plant has a maximum hourly design rate (MHDR) of 720 tons per hour (tph). Best Management Practices will be used to control fugitive emissions from haul roads and storage piles. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

Page No.	2
Permit No.	
Project No.	2007-08-083

**GENERAL 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); by the Missouri Rules listed in Title 10, Division 10 of the Codes of State Regulations (specifically 10 CSR 10-6.060); by 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority"; by 10 CSR 10-6.010 "Ambient Air Quality Standards" and 10 CSR 10-6.060 subsections (5)(D) and (6)(A); and by control measures requested by the applicant, in their permit application, to reduce the amount of air pollutants being emitted, in accordance with 10 CSR 10-6.060 paragraph (6)(E)3. Furthermore, one or more of the Subparts of 40 CFR Part 60, New Source Performance Standards (NSPS), applies to this installation.*

1. **Portable Equipment Identification Requirement**  
To assure that each component is properly identified as being a part of this portable concrete plant (PORT-0587), Fred Weber, Inc. shall provide and maintain suitable, easily read permanent markings on each component of the plant. 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 concrete plant.
2. **Relocation of Portable Concrete Plant**
  - A. The portable concrete plant shall not be operated at any site location longer than 24 consecutive months without an intervening relocation.
  - B. A complete "Portable Source Relocation Request" application must be submitted to the Air Pollution Control Program prior to any relocation of this portable concrete plant.
    - i.) If the portable concrete plant is moving to a site previously permitted, and if there are no other new plants at the site, then the application must be received by the Air Pollution Control Program at least seven (7) days prior to the relocation.
    - ii.) If the portable concrete plant is moving to a new site, or if there are other plants or equipment at the site that have not been evaluated for concurrent operation, then the application must be received by the Air Pollution Control Program at least twenty-one (21) days prior to the relocation. The application must include written notification of any concurrently operating plants.
3. **Reporting Requirement**  
The operator(s) shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedances of the limitations imposed by this permit.
4. **Record Keeping Requirement**  
The operator(s) shall maintain all records required by this permit for not less than five (5) years and shall make them available to any Missouri Department of Natural Resources' personnel upon request.
5. **Superseding Condition**  
The special conditions of this permit supersede all special conditions found in the previously issued construction permit (062007-003, Project #2007-03-021) from the Air Pollution Control Program.

Page No.	3
Permit No.	
Project No.	2007-08-083

**SITE-SPECIFIC SPECIAL CONDITIONS:**

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

Site ID No.: 179-0032  
Site Name: Fred Weber, Inc.  
Site Address: Route 1, Box 112, Annapolis, MO 63620  
Site County: Reynolds County, S15, T33N, R2E

1. Best Management Practices  
Fred Weber, Inc. shall control fugitive emissions from all of the haul roads and stockpiles at this site by performing Best Management Practices, which include the usage of paving, chemical dust suppressants, or documented watering. These practices are defined in Attachment AA. The following Best Management Practice control methods shall be used for each haul road and storage pile vehicular activity areas to control fugitive emissions from these sources.
  - A. Sand haul road (HR #1), aggregate haul road (HR #2), and cement haul road (HR #3) are allowed a maximum of 500 feet of unpaved portion. The rest of the haul roads must be completely paved.
    - i.) The operator(s) shall water, wash, and/or otherwise clean all of the paved portion of the haul road as necessary to achieve control of fugitive emissions. A daily log detailing when watering/cleaning was performed and methods used to water/clean the haul roads shall be kept by Fred Weber, Inc..
    - ii.) The operator(s) shall control emissions from the unpaved portion of the haul road by usage of chemical dust suppressants or documented watering.
  - B. The customer haul road (HR #4) shall be controlled by paving, documented watering, or chemical dust suppressants.
  - C. All vehicular activity areas shall be controlled by paving, documented watering, or chemical dust suppressants.
  
2. National Ambient Air Quality Standards (NAAQS) Limitation for Particulate Matter Less Than Ten Microns in Diameter (PM<sub>10</sub>)
  - A. The operator(s) for Fred Weber, Inc.'s portable concrete plant (PORT-0587) shall ensure, while operating at this site, that the ambient impact of PM<sub>10</sub> at or beyond the nearest property boundary does not exceed 150 µg/m<sup>3</sup> in any 24-hour period, in accordance with the Federal NAAQS requirements (40 CFR 50.6).
  - B. The portable concrete plant is permitted to operate under four (4) scenarios: Solitary, concurrent (same owner), concurrent (separate owners), and concurrent (same **and** separate owners). The total daily ambient impact of PM<sub>10</sub> at this site shall include the combined impact of the portable concrete plant and any ambient background concentration from installations or equipment located on the same site as the portable concrete plant.
    - i.) During solitary operations, the operators of the portable concrete plant do not need to maintain a daily record of materials processed and the resulting daily PM<sub>10</sub> ambient impact to show compliance with site specific condition 2A.
    - ii.) During concurrent (same owner) operations, the operators shall demonstrate compliance with site specific conditions 2A by maintaining a daily record of material processed and the resulting daily PM<sub>10</sub> ambient impact. Attachment A, *Daily Ambient PM<sub>10</sub> Impact Tracking Record, Concurrent (Same Owner) Operations*, or other equivalent forms, shall be used for this purpose.
    - iii.) During concurrent (separate owners) operations, the operators do not need to maintain a daily record of material processed and the resulting daily PM<sub>10</sub> ambient impact to show compliance with site specific condition 2A.
    - iv.) During concurrent (same **and** separate owners) operations, the operators shall demonstrate compliance with site specific conditions 2A by maintaining a daily record of material processed and the resulting daily PM<sub>10</sub> ambient impact. Attachment B, *Daily Ambient PM<sub>10</sub> Impact Tracking Record, Concurrent (Same and Separate Owners) Operations*, or other equivalent form(s) shall be used for this purpose.

Page No.	4
Permit No.	
Project No.	2007-08-083

**SITE-SPECIFIC SPECIAL CONDITIONS:**

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

---

3. Annual Emission Limit of Particulate Matter Less Than Ten Microns in Diameter (PM<sub>10</sub>)
  - A. The operator(s) shall ensure that Fred Weber, Inc.'s portable concrete plant emits less than 50 tons of PM<sub>10</sub> into the atmosphere in any 12-month period.
  - B. To demonstrate compliance, the operator(s) shall maintain a daily record of material processed and PM<sub>10</sub>. Attachment C, *Monthly PM<sub>10</sub> Emissions Tracking Record*, or other equivalent form(s), shall be used for this purpose.
  
4. Moisture Content Testing of Storage Piles Requirement
  - A. Fred Weber, Inc. claimed the moisture content of the stored rock to be greater than or equal to 1.5 wt.%, which shall be verified by testing.
  - B. Testing shall be conducted according to approved methods, such as those prescribed by the *American Society for Testing Materials (ASTM D-2216 or C-566)*, EPA AP-42 Appendix C.2, or other method(s) approved by the Director.
  - C. The operator may obtain a copy of the test results of the inherent moisture content from the supplier(s) of the aggregate. Otherwise, the operator shall obtain test samples from each storage pile area. The written analytical report shall include the raw data and moisture content (wt.%) of each sample, the test date, and the original signature of the individual performing the test. Within 30 days of completion of the required tests, the report shall be filed on-site or at the Fred Weber, Inc. main office.
  - D. If the moisture content result of the first test is less than 1.5 wt.%, a second test must be performed within 30 days. If the result of the second test is less than 1.5 wt.%, Fred Weber, Inc. shall apply for a new construction permit to account for the revised information or install wet spray devices on the affected units.
  
5. Baghouse(s) Control System Requirements
  - A. Fred Weber, Inc. shall install and operate baghouse(s) to restrict the emission of particulate matter. The baghouse(s) must be used whenever these units are in operation. The baghouse(s) shall be installed on the following units: Cement Unloading (EP3), Cement Supplement Unloading (EP4), Weigh Hopper Loadings (EP5, EP6, EP7), and Mixer Loading (EP8).
  - B. Fred Weber, Inc. shall install instruments to monitor the operating pressure drop across the baghouse. All instruments and control equipment shall be calibrated, maintained and operated according to the manufacturer's preventive maintenance recommendations. The operator(s) shall check and record the pressure drop across the baghouse filter once per operating day during silo loading. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
  - C. The operator(s) shall conduct and document a quarterly inspection and maintenance of the baghouse for structural component failures, for leaks and wear, and for the cleaning sequence of the baghouse. Replacement bags shall be kept on hand at all times to replace defective bags (The bags shall be made of fibers appropriate for the operating conditions expected to occur). All inspections, corrective actions, and instrument calibrations shall be recorded.
  
6. Restriction on Minimum Distance to Nearest Property Boundary

The primary emission point of the portable concrete plant, which is the mixer loading (EP8), shall be located at least 2,400 feet from the nearest property boundary whenever it is operating at this site.
  
7. Restrictions of the Use of Diesel Engine(s)/Generator(s)

The plant is permitted to operate an emergency diesel engine/generator in case of power failures. Otherwise, the equipment shall be powered using electrical line power and not diesel engines/generators.

# TECHNICAL REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT

## INSTALLATION DESCRIPTION

The installation is a portable concrete plant (PORT-0587) with a maximum hourly design rate (MHDR) of 720 tons per hour (tph). The portable concrete plant will produce concrete for the purpose of rebuilding the Taum Sauk upper reservoir. The rebuilding of the reservoir will require the operations of four (4) other plants.

- 1.) A rock-crushing plant.
- 2.) A primary Roller Compacted Concrete (RCC) Plant.
- 3.) A secondary RCC plant.
- 4.) An asphalt plant.

A Roland Machinery track-mounted crusher used to operate at the site but has been removed. A permit was not issued to this crusher because its emissions were below *de minimis* levels.

The installation is permitted to operate under four (4) separate scenarios.

- Solitary Operation: Operation when the concrete plant is the only plant located at the site.
- Concurrent (Same Owner) Operations: Operations when the concrete plant is located at this site at the same time as other concrete, asphalt, rock-crushing, or rock-screening plants permitted under Fred Weber, Inc..
- Concurrent (Separate Owners) Operations: Operations when the concrete plant is located at this site at the same time as other concrete, asphalt, rock-crushing, or rock-screening plants permitted under other company's names.
- Concurrent (Same **and** Separate Owners) Operations: Operations when the concrete plant is located at this site at the same time as other concrete, asphalt, rock-crushing, or rock-screening plants permitted under Fred Weber, Inc. **AND** other concrete, asphalt, rock-crushing, or rock-screening plants permitted under other company's names.

Equipment are to be powered with primary electrical power and not diesel engines/generators. If the company decides to switch to diesel engines, a new permit review will be required. An emergency engine/generator is permitted to be used in case of power failure. Emergency generators/engines are exempt from permitting according to Missouri State Rules CSR 10-6.061 *Construction Permit Exemptions* (3)(A)2.BB, but their ambient impact and emissions are included in the ambient impact and emissions analysis. The emergency generator/engine should be limited to 500 hours of operation per 12-month period.

The installation is located in Reynolds County, an attainment area for all criteria air pollutants.

**Table 1. Other Permits Issued for Site 179-0032**

Permit Number	Completed	Description
062007-003	6/5/2007	New portable plant.

## PROJECT DESCRIPTION

In the initial permit issued to the portable plant (Permit #062007-003) for this site, the installation was permitted for 2,000 feet of unpaved aggregate haul road (HR#2). At that time, the installation was planning to use aggregates already at the site. However, the installation would now like to bring in aggregates from a neighboring quarry and would like to change the distance of the aggregate haul road to 16,900 feet. A maximum of 500 feet of this haul road can be unpaved. The rest of the haul road must be paved. The fugitive emissions from the paved portion of the haul road is to be controlled by watering/cleaning and the fugitive emissions from the unpaved portion is to be controlled by documented watering or chemical dust suppressants. By washing/cleaning the paved portion of the haul road, a control efficiency of 95% can be given, instead of the 90% normally given to plants using BMPs.

## **EMISSIONS EVALUATION**

Criteria air pollutants will be emitted from this operation. The main air pollutant of concern is PM<sub>10</sub>. The potential emissions were calculated from the maximum hourly design rate (MHDR) of the equipment, appropriate emission factors, control device efficiencies, and the limiting operating hours at MHDR. The sources of the emission factors and control efficiencies are listed in the section "Permit Documents". Based on the conditioned potential emissions, the operation is considered a minor source under 10 CSR 10-6.060 section (6).

The portable concrete plant has an annual emission limit of less than 50 tons of PM<sub>10</sub> in any 12-month period. A composite PM<sub>10</sub> emission factor was developed for the portable concrete plant. The composite emission factor is incorporated into the monthly record keeping table, Attachment C. If the conditioned potential emissions of PM<sub>10</sub> were 50 tons per year or greater, then the owner would be required to submit dispersion modeling results.

The plant is allowed to operate an emergency diesel engine/generator with a design rate of 1,000 horsepower.

**Table 2: Emissions Summary (tons per year)**

<b>Air Pollutant</b>	<b>Regulatory De Minimis Levels</b>	<b>*Existing Potential Emissions</b>	<b>Existing Actual Emissions (EIQ)</b>	<b>Potential Emissions of the Application</b>	<b>**New Installation Conditioned Potential</b>	<b>***Emission Factor (lb/ton)</b>
PM <sub>10</sub>	15.0	50.00	N/A	7.30	<50.00	0.0307/0.4164
SO <sub>x</sub>	40.0	0.74	N/A	N/A	0.74	N/A
NO <sub>x</sub>	40.0	5.81	N/A	N/A	5.81	N/A
VOC	40.0	0.15	N/A	N/A	0.15	N/A
CO	100.0	1.55	N/A	N/A	1.55	N/A
HAPs	10.0/25.0	0.0025	N/A	N/A	0.0025	N/A

Note: N/A = Not Applicable

\* Existing potential emissions taken from permit # 062007-003 (Project 2007-03-021) and based on conditioned potential. Emissions include 500 hours of operation from the diesel engine/generator.

\*\* Conditioned potential based on limit in permit conditions. Emissions include 500 hours of operation from the diesel engine/generator.

\*\*\*0.0307 lbs/ton is the emission factor for the concrete plant. 0.4164 lbs/hr is the emission factor for the emergency diesel engine/generator.

## **AMBIENT AIR QUALITY IMPACT ANALYSIS**

Screening tools were used to evaluate the ambient air impact of the hourly emissions from this operation. The ambient impact was evaluated at a distance of 2,400 feet to the nearest property boundary. The ambient impact at this site shall not exceed the National Ambient Air Quality Standard (NAAQS) of 150 µg/m<sup>3</sup> of PM<sub>10</sub> at or beyond the nearest property boundary in any single 24-hour period. For sources agreeing to use Best Management Practices (BMPs), as defined in Attachment AA, haul roads and stockpiles are not modeled with screening tools. Instead, they are addressed as a background level of 20 µg/m<sup>3</sup> of PM<sub>10</sub>. To ensure conformity with NAAQS, the remaining process emissions are limited to an impact of less than 130 µg/m<sup>3</sup> of PM<sub>10</sub> at or beyond the nearest property boundary.

Screening tools were used to evaluate the daily PM<sub>10</sub> ambient impact of the plant at the nearest property boundary. During solitary and concurrent (same owner) operations, the concrete plant can operate for a twenty-four hour period without violating the NAAQS. Therefore, the plant will not be required to show compliance by keeping a record of its material processed and the resulting daily PM<sub>10</sub> ambient impact. During concurrent (same owner) and concurrent (same **and** separate owners) operations, the plant will be required to show compliance with NAAQS by not only tracking its own daily PM<sub>10</sub> ambient impact, but also the daily PM<sub>10</sub> impact of all other plants permitted under Fred Weber, Inc.. An ambient impact factor was developed using the screening tools and incorporated into the daily record keeping tables, Attachment A and Attachment B.

**Table 2: Ambient Air Quality Impact Analysis of PM<sub>10</sub>, 24-Hour Averaging Time**

Operation	Ambient Impact Factor (µg/m <sup>3</sup> ton)	Modeled Impact (µg/m <sup>3</sup> )	*Background (µg/m <sup>3</sup> )	NAAQS (µg/m <sup>3</sup> )	Daily Production Limit (tons)
1. Solitary	0.0004	6.10	20.00	150.00	17,280
2. Concurrent (Same Owner)	0.0004	**	20.00	150.00	**
3. Concurrent (Separate Owners)	0.0004	6.10	143.90	150.00	17,280
4. Concurrent, (Same and Separate Owners)	0.0004	**	105.00	150.00	**

\* During solitary and concurrent (same owner) operations, background PM<sub>10</sub> level of 20.00 µg/m<sup>3</sup> from haul roads and storage piles. During concurrent (separate owners) operations, background PM<sub>10</sub> level of 20.00 µg/m<sup>3</sup> from haul roads and storage piles and 123.90 µg/m<sup>3</sup> from the operations of plants permitted under other company's names. During concurrent (same **and** separate owners) operations, background PM<sub>10</sub> level of 20.00 µg/m<sup>3</sup> from haul roads and storage piles and 85.00 µg/m<sup>3</sup> from the operations of plants permitted under other company's names

\*\* The operator(s) must balance production among concurrently operating plants such that NAAQS is not exceeded. Ambient impact from other plants owned by Fred Weber, Inc. can be obtained from the operators of these plants.

**APPLICABLE REQUIREMENTS**

The owner is subject to compliance with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements.

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
- *Operating Permits*, 10 CSR 10-6.065
- No Operating Permit is required for this portable concrete plant.
- *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 10-3.090
- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400
- *Restriction of Emission of Sulfur Compounds*, 10 CSR 10-6.260
- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.
- The National Emission Standards for Hazardous Air Pollutants (NESHAPs) and the currently promulgated Maximum Achievable Control Technology (MACT) regulations do not apply to the proposed equipment.

**STAFF RECOMMENDATION**

On the basis of this review conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

\_\_\_\_\_  
Chia-Wei Young  
Environmental Engineer

\_\_\_\_\_  
Date

**PERMIT DOCUMENTS**

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, designating Fred Weber, Inc. as the owner and operator of the installation.
- Environmental Protection Agency (EPA) AP-42, *Compilation of Air Pollutant Emission Factors; Volume I, Stationary Point and Area Sources, Fifth Edition*.
- Noyes Data Corp. book, Orlemann, et al.1983, *Fugitive Dust Control*.
- EPA Factor Information Retrieval (FIRE) Version 6.21.
- Spreadsheet calculations of potential-to-emit and ambient impact.
- Southeast Regional Office Site Survey.
- Best Management Practices.







## Attachment AA: Best Management Practices (BMPs)- Construction Industry Fugitive Emissions

Construction Industry Sites covered by the Interim Relief Policy shall maintain Best Management Control Practices (BMPs) for fugitive emission areas at their installations when in operation. Options for BMPs are at least one of the following:

### For Haul Roads:

1. Pavement of Road Surfaces –
  - A. The operator(s) may pave all or any portion of the haul roads with materials such as asphalt, concrete, and/or other material(s) after receiving approval from the program. The pavement will be applied in accordance with industry standards for such pavement so as to achieve “Control of Fugitive Emissions<sup>1</sup>” while the plant is operating.
  - B. Maintenance and/or 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(s) shall periodically water, wash and/or otherwise clean all of the paved portions of the haul road(s) as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
  
2. Usage of Chemical Dust Suppressants –
  - A. The operator(s) shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to all the unpaved portions of the haul roads. The suppressant will be applied in accordance with the manufacturer’s suggested application rate (if available) and re-applied as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
  - B. The quantities of the chemical dust suppressant shall be applied, re-applied and/or maintained sufficient to achieve control of fugitive emissions from these areas while the plant is operating.
  - C. The operator(s) 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(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.
  
3. Usage of Documented Watering –
  - A. The operator(s) shall control the fugitive emissions from all the unpaved portions of the haul roads at the installation by consistently and correctly using the application of a water spray. Documented watering will be applied in accordance with a recommended application rate of 100 gallons per day per 1,000 square feet of unpaved/untreated surface area of haul roads as necessary to achieve control of fugitive emissions from these areas while the plant is operating. For example, the operator(s) shall calculate the total square feet of unpaved vehicle activity area requiring control on any particular day, divide that product by 1,000, and multiply the quotient by 100 gallons for that day.
  - B. The operator(s) shall maintain a log that documents daily water applications. This log shall include, but is not limited to, date and volumes (e.g., number of tanker applications and/or total gallons used) of water application. The log shall also record rationale for not applying water on day(s) the plant is in operation (e.g., meteorological situations, precipitation events, freezing, etc.)
  - C. Meteorological precipitation of any kind, (e.g. a quarter inch or more rainfall, sleet, snow, and/or freeze thaw conditions) which is sufficient in the amount or condition to achieve control of fugitive emissions from these areas while the plant is operating.
  - D. 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. The operator(s) shall record a brief description of such events in the same log as the documented watering.
  - E. The operator(s) shall record the date and the amount of water applied for each application on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.

<sup>1</sup> 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.)

**For Vehicle Activity Areas around Open Storage Piles:**

1. Pavement of Stockpile Vehicle Activity Surfaces –
  - A. The operator(s) may pave all or any portion of the vehicle activity areas around the storage piles with materials such as asphalt, concrete, and/or other material(s) after receiving approval from the program. The pavement will be applied in accordance with industry standards for such pavement so as to achieve control of fugitive emissions while the plant is operating.
  - B. Maintenance and/or 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(s) shall periodically water, wash and/or otherwise clean all of the paved portions of the vehicle activity areas around the storage piles as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
  
2. Usage of Chemical Dust Suppressants –
  - A. The operator(s) shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to all the vehicle activity areas around the open storage piles. The suppressant will be applied in accordance with the manufacturer's suggested application rate (if available) and re-applied as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
  - B. The quantities of the chemical dust suppressant shall be applied, re-applied and/or maintained sufficient to achieve control of fugitive emissions from these areas while the plant is operating.
  - C. The operator(s) 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(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.
  
3. Usage of Documented Watering –
  - A. The operator(s) shall control the fugitive emissions from all the vehicle activity areas around the storage piles at the installation by consistently and correctly using the application of a water spray. Documented watering will be applied in accordance with a recommended application rate of 100 gallons per day per 1,000 square feet of unpaved/untreated surface area of vehicle activity areas around the storage piles as necessary to achieve control of fugitive emissions from these areas while the plant is operating. (Refer to example for documented watering of haul roads.)
  - B. The operator(s) shall maintain a log that documents daily water applications. This log shall include, but is not limited to, date and volumes (e.g., number of tanker applications and/or total gallons used) of water application. The log shall also record rationale for not applying water on day(s) the plant is in operations (e.g., meteorological situations, precipitation events, freezing, etc.)
  - C. Meteorological precipitation of any kind, (e.g. a quarter inch or more rainfall, sleet, snow, and/or freeze thaw conditions) which is sufficient in the amount or condition to achieve control of fugitive emissions from these areas while the plant is operating.
  - D. 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. The operator(s) shall record a brief description of such events in the same log as the documented watering.
  - E. The operator(s) shall record the date and the amount of water applied for each application on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.

Ms. Genevieve Bodnar  
Environmental Manager  
Fred Weber, Inc.  
2320 Creve Coeur Mill Road  
Maryland Heights, MO 63043

RE: New Source Review Permit - Project Number: 2007-08-083

Dear Mr. Bodnar:

Enclosed with this letter is your New Source Review permit. Please review your permit carefully and note the special conditions, if any, and the requirements in your permit.

Operation in accordance with the conditions and requirements in your permit and the New Source Review application submitted for project 2007-08-083 is necessary for continued compliance. The section of the permit entitled "Technical Review of Application for Authority to Construct" should not be separated from the main portion of your permit. The entire permit must be retained in your files. 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.

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

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale  
New Source Review Unit Chief

KBH:cwyl

Enclosures

c: Southeast Regional Office  
PAMS File: 2007-08-083

Permit Number: