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: 102009-001
Project Number: 2009-09-007


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

Installation Name: Fred Weber, Inc. - Concrete Plant 4

Installation ID: PORT-0078

Installation Address: 91 Truman Rd., Doolittle, MO 65550

Location Information: Phelps County, S11, T37N, R9W

Application for Authority to Construct was made for:
The installation of a diesel generator for PORT-0078 when electric power is not available. 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.

OCT - 2 2009

EFFECTIVE DATE

DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES
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. 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 devises shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Departments’ Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant sources(s). The information must be made available within 30 days of actual startup. 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 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 sources(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 at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.
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) 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 (12)(A)10. “Conditions required by permitting authority.”

1. Superseding Condition
   The conditions of this permit supersede all special conditions found in the previously issued construction permits STLC-5671, STLC-5671A, STLC-5671B, STLC-5671C, STLC-5671D, STLC-5671E and STLC-5671F from the Air Pollution Control Program.

2. Portable Equipment Identification Requirement
   Fred Weber, Inc. - Concrete Plant 4 shall maintain 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 rock crushing plant.

3. Relocation of Portable Rock Crushing Plant
   A. Fred Weber, Inc. - Concrete Plant 4 shall not be operated at any location longer than 24 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 (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 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, 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.
GENERAL SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

4. Engine Location, Size and Identification Requirement
   A. Any site that requires a diesel engine/generator for any purpose, Fred Weber, Inc. shall use one or multiple diesel engine with a combined power output of less than or equal to 540.0 Break Horsepower (BHP)

   B. Every site where a diesel engine/generator is being used the location, engine size, and serial number must be recorded using Attachment B or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.

   C. If at a new site where the Air Pollution Control Program has been notified in a Portable Source Relocation Request that hard-wire electric power will be used, Fred Weber, Inc. may analyze the potential emissions of PORT-0078 at the new site without accounting for the diesel engine’s emissions.

5. Record Keeping Requirement
   Fred Weber, Inc. - Concrete Plant 4 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.
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 (12)(A)10. “Conditions required by permitting authority.”

PORT ID Number: PORT-0078
Site ID Number: 161-0062
Site Name: Doolittle
Site Address: 1703 N. Bishop Ave Doolittle, MO 65550
Site County: Phelps S11, T37N, R9W

1. Best Management Practices Requirement
   Fred Weber, Inc. - Concrete Plant 4 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 AA.

2. Ambient Air Impact Limitation
   A. Fred Weber, Inc. - Concrete Plant 4 shall not cause an exceedance of the National Ambient Air Quality Standard (NAAQS) for particulate matter less than ten microns in aerodynamic diameter (PM\textsubscript{10}) of 150.0 µg/m\textsuperscript{3} 24-hour average in ambient air.
   B. Fred Weber, Inc. - Concrete Plant 4 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. Fred Weber, Inc. - Concrete Plant 4 shall account for the impacts from other sources of PM\textsubscript{10} as instructed in Attachment A.

3. Moisture Content Testing Requirement
   A. Fred Weber, Inc. - Concrete Plant 4 shall verify that the moisture content of the processed rock is greater than or equal to 1.5% 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 at least 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.
   D. The test samples shall be taken from rock that has been processed by the plant or from each source (e.g. quarry) of aggregate.
SITE SPECIFIC SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

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 Fred Weber, Inc. - Concrete Plant 4 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 also exceed the limit, Fred Weber, Inc. - Concrete Plant 4 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 Air Pollution Control Program Compliance Assistance section within 10 days of the second noncompliant test. The wet spray devices shall be installed and operational within 40 days of the second noncompliant test.

G. In lieu of testing, Fred Weber, Inc. - Concrete Plant 4 may obtain test results of the supplier of the aggregate that demonstrate compliance with the moisture content in special condition 3.A.

4. Control Device Requirement-Baghouse
   A. Fred Weber, Inc. - Concrete Plant 4 shall control emissions from the equipment listed below using baghouses as specified in the permit application.
      1.) Cement Silo
      2.) Supplement Silo
      3.) Weigh Hopper
      4.) Truck Mix Loadout (shroud vented to baghouse)

   B. The baghouses 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 the Department of Natural Resources employees may easily observe them.

   C. Replacement filters for the baghouses 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. Fred Weber, Inc. - Concrete Plant 4 shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
SITE SPECIFIC SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

E. Fred Weber, Inc. - Concrete Plant 4 shall maintain an operating and maintenance log for the baghouses and drum filters which shall include the following:
   1.) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
   2.) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

5. Concurrent Operation Restriction
   Fred Weber, Inc. - Concrete Plant 4 is prohibited from operating with other plants that are not owned by Fred Weber, Inc.

6. Minimum Distance to Property Boundary Requirement
   The primary emission point shall be located at least 280 feet from the nearest property boundary.

7. Record Keeping Requirement
   Fred Weber, Inc. - Concrete Plant 4 shall maintain all records required by this permit for five years and make them available to any Missouri Department of Natural Resources personnel upon request.

8. Reporting Requirement
   Fred Weber, Inc. - Concrete Plant 4 shall report to the Air Pollution Control Program Enforcement Section P.O. Box 176, Jefferson City, MO 65102, no later than ten 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: 2009-09-007
Installation ID Number: PORT-0078
Permit Number:

Fred Weber, Inc. - Concrete Plant 4
91 Truman Rd.
Doolittle, MO 65550

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

Phelps County, S11, T37N, R9W

PROJECT DESCRIPTION

Fred Weber Inc.'s PORT-0078 is a concrete batch plant that has the ability to operate using either hard-wire electric and diesel generation power. PORT-0078 previous permits have not taken this into account. This permit will allow PORT-0078 to use diesel engines on each site where electric power is not available. This plant can produce 600 tons of concrete per hour and has baghouses controlling emissions from the cement silo, supplement silo, weigh hopper and truck mix loadout. This permit supersedes all previous permits so new 21-day relocations will be required for all previously visited sites.

The applicant is using one of the methods described in Attachment AA, “Best Management Practices,” to control emissions from haul roads and vehicular activity areas.

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

This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation’s major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.

TABLES

The following permits have been issued to Fred Weber, Inc. - Concrete Plant 4 from the Air Pollution Control Program.

Table 1: Permit History

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STLC-5671</td>
<td>New Portable Concrete Plant</td>
</tr>
<tr>
<td>STLC-5671A-F</td>
<td>Multiple 21-day Relocations</td>
</tr>
</tbody>
</table>
The table below summarizes the emissions of this project. The potential emissions of process equipment excluding emissions from haul roads and wind erosion, which are site specific, should not vary from site to site. The potential emissions of the application represent the emissions of all equipment and activities assuming continuous operation (8760 hours per year). The conditioned potential emissions are based on a daily limit of 130 µg/m³ in order to show compliance with the National Ambient Air Quality Standards.

Table 2: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th>Air Pollutant</th>
<th>De Minimis Level/ SMAL</th>
<th>†Potential Emissions of the Process Equipment</th>
<th>Existing Actual Emissions (2008 EIQ)</th>
<th>‡Potential Emissions of the Application</th>
<th>Conditioned Potential Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM₁₀</td>
<td>15.0</td>
<td>13.67</td>
<td>1.00</td>
<td>34.96</td>
<td>11.59</td>
</tr>
<tr>
<td>SOₓ</td>
<td>40.0</td>
<td>0.24</td>
<td>N/D</td>
<td>0.24</td>
<td>0.08</td>
</tr>
<tr>
<td>NOₓ</td>
<td>40.0</td>
<td>74.15</td>
<td>N/D</td>
<td>74.15</td>
<td>24.59</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>6.05</td>
<td>N/D</td>
<td>6.05</td>
<td>2.01</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>15.97</td>
<td>N/D</td>
<td>15.97</td>
<td>5.30</td>
</tr>
<tr>
<td>Total HAPs</td>
<td>25.0</td>
<td>0.07</td>
<td>N/D</td>
<td>0.07</td>
<td>0.02</td>
</tr>
</tbody>
</table>

N/A = Not Applicable; N/D = Not Determined
†Excludes haul road and wind erosion emissions
‡Includes site specific haul road and storage pile emissions
§Screening Model Action Level (SMAL)

Table 3: Ambient Air Quality Impact Analysis

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>¹NAAQS/ RAL (µg/m³)</th>
<th>²Averaging Time</th>
<th>³Maximum Modeled Impact (µg/m³)</th>
<th>⁴Limited Impact (µg/m³)</th>
<th>⁵Background (µg/m³)</th>
<th>⁶Daily Limit (tons/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM₁₀</td>
<td>150.0</td>
<td>24-hour</td>
<td>605.73</td>
<td>130.0</td>
<td>20.0</td>
<td>4775</td>
</tr>
</tbody>
</table>

¹National Ambient Air Quality Standards (NAAQS) and Risk Assessment Level (RAL)
²Modeled impact at maximum capacity with controls
³Indirect limit based on compliance with NAAQS.
⁴Solitary operation or operation with other plants that are owned by Fred Weber, Inc.

EMISSIONS 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 concrete batch plant were 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 were 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 the diesel engines/generators were calculated using emission factors from AP-42 Section 3.3 Gasoline and Diesel Industrial Engines,” October 1996.

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 is applied to the emission calculations for the use of BMPs. Emissions from 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 1.5% 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.”

AMBIENT AIR QUALITY IMPACT ANALYSIS

An ambient air quality impact analysis (AAQIA) was performed to determine the impact of PM$_{10}$. The Air Pollution Control Program requires an AAQIA of PM$_{10}$ for all asphalt, concrete and rock-crushing plants regardless of the level of PM$_{10}$ emissions if a permit is required. The AAQIA was performed using the Air Pollution Control Program’s generic nomographs. For each pollutant that was modeled, the maximum concentration that occurs at or beyond the site boundary was compared to the National Ambient Air Quality Standard (NAAQS). The distance from the plant to the nearest site boundary is 280 feet. When the plant operates continuously, the modeled concentration of PM$_{10}$ is greater than the NAAQS, so the plant’s production was limited to ensure compliance with the NAAQS.

This plant uses BMPs to control emissions from haul roads and vehicular activity areas, so emissions from these sources were not included in the AAQIA. Instead they were addressed as a background concentration of 20 µg/m$^3$ of PM$_{10}$ in accordance with the Air Pollution Control Program’s BMPs interim policy.

OPERATING SCENARIOS

The plant is permitted to operate with other plants located at the site as long as they are owned by Fred Weber, Inc. and the NAAQS is not exceeded. The following scenario explains how Fred Weber, Inc. - Concrete Plant 4 shall demonstrate compliance with the NAAQS.

- When plants that are owned by Fred Weber, Inc. are located at the site, Fred Weber, Inc. must calculate the daily impact of each plant and limit the total impact of all plants below the NAAQS.
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$_{10}$ are conditioned below de minimis levels.

APPLICABLE REQUIREMENTS

Fred Weber, Inc. - Concrete Plant 4 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. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- **Submission of Emission Data, Emission Fees and Process Information**, 10 CSR 10-6.110. The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required June 1 for the previous year's emissions.

- 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 Visible Air Contaminants**, 10 CSR 10-6.220

- **Restriction of Emission of Odors**, 10 CSR 10-3.090

SPECIFIC REQUIREMENTS

- **Restriction of Emission of Particulate Matter From Industrial Processes**, 10 CSR 10-6.400

- None of the New Source Performance Standards (NSPS) apply to the installation.

- 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.

- **Restriction of Emission of Sulfur Compounds**, 10 CSR 10-6.260
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, I recommend this permit be granted with special conditions.

Gerad Fox
Environmental Engineer

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated August 28, 2009, received August 31, 2009, designating Fred Weber, Inc. as the owner and operator of the installation.


- Southeast Regional Office Site Survey, not yet received.
Attachment A: Ambient Impact Tracking Sheet
Fred Weber, Inc. - Concrete Plant 4 PORT-0078
Project Number: 2009-09-007

Site Name: Doolittle
Site Address: 1703 N. Bishop Ave, Doolittle, MO 65550
Site County: Phelps, S11, T37N, R9W

This sheet covers the period from ____________________ to ____________________ (Copy as needed)  
(Month, Day Year)(Month, Day Year)

<table>
<thead>
<tr>
<th>Date</th>
<th>Daily Production (tons)</th>
<th>Impact Factor (µg/m³/ton)</th>
<th>Impact¹ (µg/m³)</th>
<th>Impact² (µg/m³)</th>
<th>Impact³ (µg/m³)</th>
<th>Background (µg/m³)</th>
<th>Total Impact³ (µg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>1,563</td>
<td>0.0272</td>
<td>42.5</td>
<td>10.2</td>
<td>N/A</td>
<td>N/A</td>
<td>20</td>
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</table>

¹Calculate the impact for PORT-0078 by multiplying the daily production by the impact factor.
²Input the impact for any plants owned by Fred Weber, Inc. that are operating on the site.
³Calculate the total impact by adding the applicable impacts and background. A total of 150 µg/m³ or less is necessary for compliance.
# Attachment B: Diesel Engine Tracking Sheet

Fred Weber, Inc. - Concrete Plant 4 PORT-0078
Project Number: 2009-09-007

<table>
<thead>
<tr>
<th>Location</th>
<th>Start Up Date</th>
<th>Completion Date</th>
<th>Diesel Engine Size (BHP)</th>
<th>Diesel Engine Serial Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td></td>
<td></td>
<td>540.0</td>
<td></td>
</tr>
</tbody>
</table>

1. Date PORT-0078 is moved to the location in the adjacent column.
2. Date PORT-0078 is removed from the location in the adjacent column.
3. The diesel engine size must be below or equal to 540.0 BHP.
Attachment AA: 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\(^1\) to achieve control of fugitive emissions 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.)
### Attachment BB: Emission Calculations

**Fred Weber, Inc. - Concrete Plant 4**

**2009-09-007**

<table>
<thead>
<tr>
<th>Description</th>
<th>MHDR Units</th>
<th>1^\text{MHDR}</th>
<th>e^\text{MHDR Units}</th>
<th>2^\text{PM}_{10} \text{ EF}</th>
<th>EF Units</th>
<th>Control Eff. %</th>
<th>Emissions (lb/hr)</th>
<th>Modeling Rate (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate Transfer MC 1.5</td>
<td>tph</td>
<td>288.00</td>
<td></td>
<td>0.00413</td>
<td>lb/ton</td>
<td>N/A</td>
<td>1.19</td>
<td>0.394</td>
</tr>
<tr>
<td>Sand Transfer MC 4.17</td>
<td>tph</td>
<td>192.00</td>
<td></td>
<td>0.00099</td>
<td>lb/ton</td>
<td>N/A</td>
<td>0.19</td>
<td>0.063</td>
</tr>
<tr>
<td>Cement Unloading to Silo</td>
<td>tph</td>
<td>72.00</td>
<td></td>
<td>0.00034</td>
<td>lb/ton</td>
<td>N/A</td>
<td>0.02</td>
<td>0.008</td>
</tr>
<tr>
<td>Supplement Unloading (pneumatic)</td>
<td>tph</td>
<td>18.00</td>
<td></td>
<td>0.00490</td>
<td>lb/ton</td>
<td>N/A</td>
<td>0.09</td>
<td>0.029</td>
</tr>
<tr>
<td>Weight Hopper Loading</td>
<td>tph</td>
<td>480.00</td>
<td></td>
<td>0.00200</td>
<td>lb/ton</td>
<td>99.00</td>
<td>0.01</td>
<td>0.003</td>
</tr>
<tr>
<td>Central Mix Unloading</td>
<td>tph</td>
<td>90.00</td>
<td></td>
<td>0.00480</td>
<td>lb/ton</td>
<td>N/A</td>
<td>0.43</td>
<td>0.143</td>
</tr>
<tr>
<td>Generator - Industrial Diesel</td>
<td>1000 gal/hr</td>
<td>0.0280</td>
<td></td>
<td>42.47000</td>
<td>lb/1000gal</td>
<td>0.00</td>
<td>1.19</td>
<td>0.395</td>
</tr>
<tr>
<td>Storage Pile - Load In MC 1.5</td>
<td>tph</td>
<td>492.00</td>
<td></td>
<td>0.00410</td>
<td>lb/ton</td>
<td>N/A</td>
<td>2.02</td>
<td>0.669</td>
</tr>
<tr>
<td>Storage Pile - Load Out MC 1.5</td>
<td>tph</td>
<td>492.00</td>
<td></td>
<td>0.00410</td>
<td>lb/ton</td>
<td>N/A</td>
<td>2.02</td>
<td>0.669</td>
</tr>
<tr>
<td>Storage Pile - Wind Errosion</td>
<td>acres</td>
<td>0.50</td>
<td></td>
<td>0.08917</td>
<td>lb/acre-hr</td>
<td>N/A</td>
<td>0.04</td>
<td>0.015</td>
</tr>
<tr>
<td>Storage Pile - Vehicular Activity</td>
<td>VMT/hr</td>
<td>0.93</td>
<td></td>
<td>1.58203</td>
<td>lb/VMT</td>
<td>90.00</td>
<td>0.15</td>
<td>0.049</td>
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<tr>
<td>Haul Road HR #1</td>
<td>VMT/hr</td>
<td>3.69</td>
<td></td>
<td>1.71730</td>
<td>lb/VMT</td>
<td>90.00</td>
<td>0.63</td>
<td>0.210</td>
</tr>
</tbody>
</table>

1^\text{Maximum Hourly Design Rate (MHDR)}

2^\text{Emission Factor (EF)}

3^\text{The Modeling Rate is the emission rate scaled to the daily hours of operation at MHDR allow by the permit.}
Ms. Genevieve Bodnar  
Environmental Manager  
Fred Weber, Inc. - Concrete Plant 4  
2320 Creve Coeur Mill Road  
Maryland Heights, MO 63043  

RE: New Source Review Permit - Project Number: 2009-09-007  

Dear Ms. Bodnar:  

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, 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.  

If you have any questions regarding this permit, please do not hesitate to contact Gerad Fox, at the Departments’ 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  

Kendall B. Hale  
New Source Review Unit Chief  

KBH:gfl  
Enclosures  

c: Southeast Regional Office  
PAMS File: 2009-09-007  

Permit Number: