STATE OF 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: 022007-006
Project Number: 2006-11-012
139-0025

Owner: Pace Construction Company
Owner’s Address: 1620 Woodson Road, St. Louis, MO 63114
Installation Name: Pace Construction Co. - Danville
Installation Address: #12 Tree Farm Road (I-70 South Outer Road), Danville, MO 63361
Location Information: Montgomery County, S25, T48N, R6W

Application for Authority to Construct was made for:

The permitting of an existing grandfathered asphalt plant. Asphalt is produced through a Batch Mix Dryer. The asphalt plant has a maximum hourly design rate (MHDR) of 270 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 (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 (listed as attachments starting on page 2) are applicable to this permit.

FEB - 9 2007
EFFECTIVE DATE

DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

MO 780-1204 (1-03)
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.
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. Best Management Practices
   Pace Construction Co. - Danville 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.

2. National Ambient Air Quality Standards (NAAQS) Limitation for Particulate Matter Less Than Ten Microns in Diameter (PM_{10})
   A. The operator(s) for Pace Construction Co. - Danville’s asphalt plant (139-0025) shall ensure, while operating at this site, that the ambient impact of PM_{10} at or beyond the nearest property boundary does not exceed 150 µg/m³ in any 24-hour period, in accordance with the Federal NAAQS requirements (40 CFR 50.6).
   B. The stationary asphalt plant is permitted to operate under four (4) scenarios: Solitary, Concurrent (Same Owner), Concurrent (Separate Owner), and Concurrent (Same and Separate Owner) Operations. The total daily ambient impact of PM_{10} at this site shall include the combined impact of the asphalt plant and any ambient background concentration from installations or equipment located on the same site as the asphalt plant.
   C. During Solitary Operations, the stationary asphalt plant does not need to keep records to demonstrate compliance with the NAAQS. During Concurrent (Same Owner), Concurrent (Separate Owner), and Concurrent (Same and Separate Owner) Operations, the stationary asphalt plant shall demonstrate compliance by maintaining a daily record of material processed and the resulting daily PM_{10} ambient impact. Attachment A, or other equivalent forms, shall be used for this purpose during Concurrent (Same Owner) Operations. Attachment B, or other equivalent forms, shall be used for this purpose during Concurrent (Separate Owner) Operations. Attachment C, or other equivalent forms, shall be used for this purpose during Concurrent (Same and Separate Owner) Operations.

3. Annual Emission Limit of Particulate Matter Less Than Ten Microns in Diameter (PM_{10})
   A. The operator(s) shall ensure that Pace Construction Co. - Danville’s asphalt plant emits less than 15 tons of PM_{10} into the atmosphere in any 12-month period.
   B. To demonstrate compliance with the annual limit of 15 tons, the operator(s) shall maintain a daily record of material processed and PM_{10}. Attachment D, Monthly PM_{10} Emissions Tracking Record, or other equivalent form(s), shall be used for this purpose.

4. Moisture Content Testing of Storage Piles Requirement
   A. The moisture content of the stockpiled rock will reduce particulate emissions. Pace Construction Co. - Danville 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 source of untested aggregate. 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 either on-site or at Pace Construction Co.’s main office.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

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.%, Pace Construction Co. - Danville 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. Pace Construction Co. - Danville 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: Asphalt Dryer
   B. The Pace Construction Co. - Danville 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 baghouse operating pressure drop shall be maintained according to manufacturer's specifications.
   C. The operator(s) shall conduct and document a quarterly inspection and any 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 asphalt plant, which is the stack of the asphalt dryer, shall be located at least 200 feet from the nearest property boundary whenever it is operating at this site.

7. Restrictions on the Use of Diesel Engine(s)/Generator(s)
   Pace Construction Co. – Danville’s stationary asphalt plant shall power its equipment using line power. No diesel engine(s)/generator(s) shall be used at the site. If Pace Construction Co. – Danville decides to use diesel engine(s)/generator(s), a new permit review will be required.

8. 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.

9. Reporting Requirement
   The operator(s) shall report to the Air Pollution Control Program (APCP) 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.
TECHNICAL REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT

PROJECT DESCRIPTION

Hot Mix Asphalt (HMA) is composed of non-metallic aggregate, sand, mineral filler and other materials with liquid asphaltic cement. These materials are mixed and heated/dried in a dryer. Processed HMA is delivered as sellable product. Pace Construction Co. – Danville’s stationary asphalt plant is a grandfathered plant constructed between 1969 and 1970. This construction permit is necessary because Pace Construction Co. would like to allow for concurrent operations at the site. The emission points are listed in the attached spreadsheet summary. This installation is classified under the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2, Item 27]. The installation is located in Montgomery County, an attainment area for all criteria air pollutants. No NOVs have been issued to the plant within the last five (5) years.

The stationary asphalt plant is permitted to operate under four (4) separate scenarios.

- **Solitary Operation**: The asphalt plant operates by itself at the site.
- **Concurrent (Same Owner) Operations**: The asphalt plant operates with other concrete, asphalt, or rock-crushing plants owned by Pace Construction Company.
- **Concurrent (Separate Owner) Operations**: The asphalt plant operates with other concrete, asphalt, or rock crushing plants owned by other companies.
- **Concurrent (Same and Separate Owner) Operations**: The asphalt plant operates with concrete, asphalt, or rock-crushing plants owned by Pace Construction Company at the same time as other concrete, asphalt, or rock-crushing plants owned by other companies.

EMISSIONS EVALUATION

Criteria air pollutants will be emitted from this operation. The main air pollutants of concern are PM$_{10}$. 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”. Pace Construction Co. – Danville requested to hold the conditioned potential of all criteria pollutants under *de minimis* levels so the permit can be issued under 10 CSR 10-6.060 section (5).

The asphalt plant has an annual emission limit of less than 15 tons of PM$_{10}$ in any 12-month period. A composite PM$_{10}$ emission factor was developed for the asphalt plant. The composite emission factor is incorporated into the monthly record keeping table, Attachment D. By holding PM$_{10}$ under 15 tons, all other criteria pollutants will be held under *de minimis* levels.

The asphalt plant powers its equipment using electrical lines. No diesel engine(s)/generator(s) shall be used at the plant. If the company decides that it would like to use diesel engine(s)/generator(s), a new permit review will be required. An asphalt heater with a maximum hourly design rate of 0.020 Mgal/hr is used by the plant. Since asphalt heaters are often used to heat asphalt during the time that the plant is not running, the emissions evaluation was conducted assuming the worst case scenario of twenty-four (24) hours per day operation of the asphalt heater. The asphalt heater can then operate at any time.

Table 1: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>46.10</td>
<td>1.79</td>
<td>46.10</td>
<td>&lt;15</td>
<td>0.0390</td>
</tr>
<tr>
<td>SOx</td>
<td>40.0</td>
<td>19.32</td>
<td>0.01</td>
<td>19.32</td>
<td>10.53</td>
<td>N/A</td>
</tr>
<tr>
<td>NOx</td>
<td>40.0</td>
<td>66.79</td>
<td>0.07</td>
<td>66.79</td>
<td>22.83</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>37.87</td>
<td>0.04</td>
<td>37.87</td>
<td>12.29</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>154.18</td>
<td>0.05</td>
<td>154.18</td>
<td>50.26</td>
<td>N/A</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>4.64</td>
<td>N/A</td>
<td>4.64</td>
<td>1.50</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*Note: N/A = Not Applicable
* PM$_{10}$ Conditioned potential based on limit in permit conditions. Other pollutants proportionally reduced.
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 200 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/m³ of PM₁₀ 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/m³ of PM₁₀. To ensure conformity with NAAQS, the remaining process emissions are limited to an impact of less than 130 µg/m³ of PM₁₀ at or beyond the nearest property boundary.

The screening tools were used to develop ambient impact factors for the asphalt plant during each operating scenario. The ambient impact factors are incorporated into daily record keeping tables, Attachments A, B, and C.

The record keeping requirements for each operating scenario are as follows. All PM₁₀ concentrations are measured to the nearest property boundary.

- **Solitary Operation:** Pace Construction Co. – Danville can operate for twenty-four (24) hours without violating NAAQS. No record keeping is necessary.
- **Concurrent (Same Owner) Operation:** Pace Construction Co. – Danville must track not only its own daily PM₁₀ ambient impact but also the daily PM₁₀ ambient impact of all other plants at the site. The combined daily PM₁₀ ambient impact at the site must not exceed 130 µg/m³. 20.00 µg/m³ are reserved for the use of Best Management Practices. Attachment A, or equivalent forms, shall be used for this operating scenario.
- **Concurrent (Separate Owners) Operation:** Pace Construction Co. – Danville must track its own daily PM₁₀ ambient impact to ensure that it does not exceed 11.88 µg/m³. Asphalt, concrete, or rock-crushing plants owned by other companies are allowed 113.43 µg/m³. 20.00 µg/m³ are reserved for the use of Best Management Practices. Attachment B, or equivalent forms, shall be used for this scenario.
- **Concurrent (Same and Separate Owners) Operation:** Pace Construction Co. – Danville must track not only its own daily PM₁₀ ambient impact but also the daily PM₁₀ ambient impact of all other plants owned by Pace Construction Co. at the site. The operators of Pace Construction Co. plants must ensure that the combined daily PM₁₀ ambient impact from all plants owned by Pace Construction Co. does not exceed 35.00 µg/m³. Asphalt, concrete, or rock-crushing plants owned by other companies are allowed 95 µg/m³. 20.00 µg/m³ are reserved for the use of Best Management Practices. Attachment C, or equivalent forms, shall be used for this scenario.

### Table 2: Ambient Air Quality Impact Analysis of PM₁₀, 24-Hour Averaging Time

<table>
<thead>
<tr>
<th>Operation</th>
<th>Ambient Impact Factor (µg/m³/ton)</th>
<th>Modeled Impact (µg/m³)¹</th>
<th>Impact from Small Combustion Sources (µg/m³)²</th>
<th>Background (µg/m³)</th>
<th>NAAQS (µg/m³)</th>
<th>Daily Production Limit (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Solitary</td>
<td>0.0058</td>
<td>37.59</td>
<td>4.69</td>
<td>20.00³</td>
<td>150.00</td>
<td>6,480</td>
</tr>
<tr>
<td>2. Concurrent (Same Owner)</td>
<td>0.0058</td>
<td>**⁴</td>
<td>4.69</td>
<td>20.00³</td>
<td>150.00</td>
<td>**⁴</td>
</tr>
<tr>
<td>3. Concurrent, (Separate Owners)</td>
<td>0.0044</td>
<td>11.88</td>
<td>4.69</td>
<td>133.43⁴</td>
<td>150.00</td>
<td>2,700</td>
</tr>
<tr>
<td>4. Concurrent (Same and Separate Owners)</td>
<td>0.0057</td>
<td>**⁴</td>
<td>4.69</td>
<td>115.00⁵</td>
<td>150.00</td>
<td>**⁴</td>
</tr>
</tbody>
</table>

**Note 1:** Modeled Impact (µg/m³) does not include daily PM₁₀ ambient impact from the twenty-four (24) hours per day operation of the asphalt heater.

**Note 2:** Impact from Small Combustion Sources (µg/m³) is the daily PM₁₀ ambient impact from the twenty-four (24) hours per day operation of the asphalt heater.

**Note 3:** Background PM₁₀ level of 20.00 µg/m³ from haul roads and stockpiles.

**Note 4:** Background PM₁₀ level of 20.00 µg/m³ from haul roads and stockpiles. 113.43 µg/m³ from the operation of other asphalt, concrete, or rock-crushing plants owned by other companies.

**Note 5:** Background PM₁₀ level of 20.00 µg/m³ from haul roads and stockpiles. 95.00 µg/m³ from the operation of other asphalt, concrete, or rock-crushing plants owned by other companies.

**Note:** The operator(s) must balance production among concurrently operating plants, with the ambient impact factors for each, such that NAAQS is not exceeded. Ambient Impact (µg/m³) of other plants owned by Pace Construction 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 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
- 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
- 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 (5), 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

PERMIT DOCUMENTS
The following documents are incorporated by reference into this permit:
- The Application for Authority to Construct form, designating Pace Construction Company 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.
- Spreadsheet calculations of potential-to-emit and ambient impact.
- St. Louis Regional Office Site Survey.
- Best Management Practices
## Attachment A: Daily Ambient PM10 Impact Tracking Record

**Pace Construction Co. - Danville, 139-0025**

**Concurrent (Same Owner Operation)**

**Project Number:** 2006-11-012  
**County, CSTR:** Montgomery County (S25, T48N, R6W)  
**Primary Unit Size:** 270 tph  
**Distance to Nearest Property Boundary:** 200 feet

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Daily Production (tons)</th>
<th>Ambient Impact Factor (µg/m^3/ton)</th>
<th>Daily PM10 Impact Without Small Combustion Sources (µg/m^3)</th>
<th>Daily PM10 Impact of Small Combustion Sources (µg/m^3)</th>
<th>Total Daily PM10 Ambient Impact (µg/m^3)</th>
<th>Total Daily PM10 Ambient Impact (µg/m^3)</th>
<th>Back-ground PM10 Level (µg/m^3)</th>
<th>TOTAL PM10 Level (µg/m^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.0058</td>
<td>4.69</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td>0.0058</td>
<td>4.69</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td>0.0058</td>
<td>4.69</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td>0.0058</td>
<td>4.69</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td>0.0058</td>
<td>4.69</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td>0.0058</td>
<td>4.69</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td>0.0058</td>
<td>4.69</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td>0.0058</td>
<td>4.69</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td>0.0058</td>
<td>4.69</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td>0.0058</td>
<td>4.69</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
</tr>
</tbody>
</table>

**Note 1:** The Daily PM10 Impact Without Small Combustion Sources (µg/m^3) for each plant is calculated by multiplying the Daily Production (tons) by the matching Ambient Impact Factor. This number does not include the daily PM10 ambient impact from the twenty-four (24) hours per day operation of the asphalt heater.

**Note 2:** The Daily PM10 Impact of Small Combustion Sources (µg/m^3) is the impact from the twenty-four (24) hours per day operation of the asphalt heater.

**Note 3:** The Total Daily PM10 Ambient Impact (µg/m^3) is the sum of the Daily PM10 Impact Without Small Combustion Sources (µg/m^3) and the Daily PM10 Ambient impact of Small Combustion Sources (µg/m^3).

**Note 4:** The Total Daily PM10 Ambient Impact (µg/m^3) of other asphalt, concrete, or rock-crushing plants owned by Pace Construction Co. can be obtained from the operators of these plants.

**Note 5:** Background PM10 Level (µg/m^3) is from Haul Roads and Stockpiles.

**Note 6:** The TOTAL PM10 Level (µg/m^3) is calculated by summing the Total Daily PM10 Ambient Impact(s) and the Background PM10 Level. A TOTAL PM10 Level of less than 150 µg/m^3 in any 24-hour period indicates compliance.
<table>
<thead>
<tr>
<th>Date</th>
<th>Daily Production (tons)</th>
<th>Ambient Impact Factor (µg/m³/ton)</th>
<th>&quot;Daily PM₁₀ Impact Without Small Combustion Sources (µg/m³)&quot;</th>
<th>&quot;Daily PM₁₀ Impact of Small Combustion Sources (µg/m³)&quot;</th>
<th>&quot;Total Daily PM₁₀ Ambient Impact (µg/m³)&quot;</th>
<th>&quot;Total Daily PM₁₀ Ambient Impact (µg/m³)&quot;</th>
<th>&quot;Total Daily PM₁₀ Ambient Impact (µg/m³)&quot;</th>
<th>&quot;Back-ground PM₁₀ Level (µg/m³)&quot;</th>
<th>&quot;TOTAL PM₁₀ Level (µg/m³)&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0.0044</td>
<td>4.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>133.43</td>
<td>133.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0044</td>
<td>4.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>133.43</td>
<td>133.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0044</td>
<td>4.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>133.43</td>
<td>133.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0044</td>
<td>4.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>133.43</td>
<td>133.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0044</td>
<td>4.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>133.43</td>
<td>133.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0044</td>
<td>4.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>133.43</td>
<td>133.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0044</td>
<td>4.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>133.43</td>
<td>133.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0044</td>
<td>4.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>133.43</td>
<td>133.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0044</td>
<td>4.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>133.43</td>
<td>133.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0044</td>
<td>4.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>133.43</td>
<td>133.43</td>
</tr>
</tbody>
</table>

Note 1: The Daily PM₁₀ Impact Without Small Combustion Sources (µg/m³) for each plant is calculated by multiplying the Daily Production (tons) by the matching Ambient Impact Factor. This number does not include the daily PM₁₀ ambient impact from the twenty-four (24) hours per day operation of the asphalt heater.

Note 2: The Daily PM₁₀ Impact of Small Combustion Sources (µg/m³) is the impact from the twenty-four (24) hours per day operation of the asphalt heater.

Note 3: The "Total Daily PM₁₀ Ambient Impact (µg/m³)" is the sum of the Daily PM₁₀ Impact Without Small Combustion Sources (µg/m³) and the Daily PM₁₀ Ambient impact of Small Combustion Sources (µg/m³).

Note 4: The "Total Daily PM₁₀ Ambient Impact (µg/m³)" of other asphalt, concrete, or rock-crushing plants owned by Pace Construction Co. can be obtained from the operators of these plants.

Note 5: Background PM₁₀ Level (µg/m³) is from Haul Roads and Stockpiles and from the operations of asphalt, concrete, or rock-crushing plants owned by other companies.

Note 6: The TOTAL PM₁₀ Level (µg/m³) is calculated by summing the Total Daily PM₁₀ Ambient Impact(s) and the Background PM₁₀ Level. A TOTAL PM₁₀ Level of less than 150 µg/m³ in any 24-hour period indicates compliance.
## Attachment C: Daily Ambient PM_{10} Impact Tracking Record

**Pace Construction Co. - Danville, 139-0025**  
**Concurrent (Same and Separate Owner Operation)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Daily Production (tons)</th>
<th>Ambient Impact Factor (µg/m^{3}ton)</th>
<th>^1Daily PM_{10} Impact Without Small Combustion Sources (µg/m^3)</th>
<th>^2Daily PM_{10} Impact of Small Combustion Sources (µg/m^3)</th>
<th>^3Total Daily PM_{10} Ambient Impact (µg/m^3)</th>
<th>^4Total Daily PM_{10} Ambient Impact (µg/m^3)</th>
<th>^5Back-ground PM_{10} Level (µg/m^3)</th>
<th>^6TOTAL PM_{10} Level (µg/m^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-01</td>
<td>0.0057</td>
<td>4.69</td>
<td></td>
<td></td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
</tr>
<tr>
<td>11-02</td>
<td>0.0057</td>
<td>4.69</td>
<td></td>
<td></td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
</tr>
<tr>
<td>11-03</td>
<td>0.0057</td>
<td>4.69</td>
<td></td>
<td></td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
</tr>
<tr>
<td>11-04</td>
<td>0.0057</td>
<td>4.69</td>
<td></td>
<td></td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
</tr>
<tr>
<td>11-05</td>
<td>0.0057</td>
<td>4.69</td>
<td></td>
<td></td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
</tr>
<tr>
<td>11-06</td>
<td>0.0057</td>
<td>4.69</td>
<td></td>
<td></td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
</tr>
<tr>
<td>11-07</td>
<td>0.0057</td>
<td>4.69</td>
<td></td>
<td></td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
</tr>
<tr>
<td>11-08</td>
<td>0.0057</td>
<td>4.69</td>
<td></td>
<td></td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
</tr>
<tr>
<td>11-09</td>
<td>0.0057</td>
<td>4.69</td>
<td></td>
<td></td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
</tr>
<tr>
<td>11-10</td>
<td>0.0057</td>
<td>4.69</td>
<td></td>
<td></td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
</tr>
<tr>
<td>11-11</td>
<td>0.0057</td>
<td>4.69</td>
<td></td>
<td></td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
</tr>
<tr>
<td>11-12</td>
<td>0.0057</td>
<td>4.69</td>
<td></td>
<td></td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
</tr>
<tr>
<td>11-13</td>
<td>0.0057</td>
<td>4.69</td>
<td></td>
<td></td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
</tr>
<tr>
<td>11-14</td>
<td>0.0057</td>
<td>4.69</td>
<td></td>
<td></td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
<td>115.00</td>
</tr>
</tbody>
</table>

**Note 1:** The Daily PM_{10} Impact Without Small Combustion Sources (µg/m^3) for each plant is calculated by multiplying the Daily Production (tons) by the matching Ambient Impact Factor. This number does not include the daily PM_{10} ambient impact from the twenty-four (24) hours per day operation of the asphalt heater.

**Note 2:** The Daily PM_{10} Impact of Small Combustion Sources (µg/m^3) is the impact from the twenty-four (24) hours per day operation of the asphalt heater.

**Note 3:** The Total Daily PM_{10} Ambient Impact (µg/m^3) is the sum of the Daily PM_{10} Impact Without Small Combustion Sources (µg/m^3) and the Daily PM_{10} Ambient Impact of Small Combustion Sources (µg/m^3).

**Note 4:** The Total Daily PM_{10} Ambient Impact (µg/m^3) of other asphalt, concrete, or rock-crushing plants owned by Pace Construction Co. can be obtained from the operators of these plants.

**Note 5:** Background PM_{10} Level (µg/m^3) is from Haul Roads and Stockpiles.

**Note 6:** The TOTAL PM_{10} Level (µg/m^3) is calculated by summing the Total Daily PM_{10} Ambient Impact(s) and the Background PM_{10} Level. A TOTAL PM_{10} Level of less than 150 µg/m^3 in any 24-hour period indicates compliance.
**Attachment D: Monthly PM$_{10}$ Emissions Tracking Record**

Pace Construction Co. - Danville, 139-0025

**Project Number:** 2006-11-012  
**County, CSTR:** Montgomery County (S25, T48N, R6W)  
**Primary Unit Size:** 270 tph  
**Distance to Nearest Property Boundary:** 200 feet

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

<table>
<thead>
<tr>
<th>Month</th>
<th>Monthly Production (tons)</th>
<th>Composite PM$_{10}$ Emission Factor (lbs/ton)</th>
<th>¹Monthly PM$_{10}$ Emissions (lbs)</th>
<th>²Monthly PM$_{10}$ Emissions (tons)</th>
<th>³12-Month PM$_{10}$ Emissions (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
<td>0.0390</td>
</tr>
</tbody>
</table>

**Note 1:** The Monthly Emissions (lbs) are calculated by multiplying the Monthly Production (tons) by the Composite Emission Factor (lbs/ton).

**Note 2:** The Monthly Emissions (tons) are calculated by dividing the Monthly Emissions (lbs) by 2,000.

**Note 3:** The 12-Month Emissions (tons/year) are a rolling total calculated by adding the Month’s Emissions (tons) to the Monthly Emissions (tons) of the previous eleven (11) months. A total of less than 15 tons in any consecutive 12-month period indicates compliance.
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:

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" 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.

Usage of Chemical Dust Suppressants –

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.

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.

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.

Usage of Documented Watering –

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.

A. 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.)

B. 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.

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. The operator(s) shall record a brief description of such events in the same log as the documented watering.

D. 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.

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.)
For Vehicle Activity Areas around Open Storage Piles:

Pavement of Stockpile Vehicle Activity Surfaces –
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.

A. 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.

B. 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.

Usage of Chemical Dust Suppressants –
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.

A. 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.

B. 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.

Usage of Documented Watering –
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.)

A. 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.)

B. 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.

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. The operator(s) shall record a brief description of such events in the same log as the documented watering.

D. 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.
Mr. Mark Zaiontz  
Plant Operations Manager  
Pace Construction Company  
1620 Woodson Road  
St. Louis, MO 63114  

RE: New Source Review Permit - Project Number: 2006-11-0-12  

Dear Mr. Zaiontz:  

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 plant information submitted in your New Source Review Permit Application for Project 2006-11-012 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.  

This asphalt plant applied for an operating permit in 1998 and received it in 2001. This operating permit was also renewed in 2003. Since the permit for the asphalt plant limits all pollutants to under de minimis levels and NSPS subpart I does not apply to this plant (because this plant was constructed before 1973 and has not been modified since its construction), an operating permit will no longer be required.  

If you have any questions regarding this permit, please do not hesitate to contact me at (573) 751-4817, or you may write to the Department of Natural Resources’ Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Thank you for your attention to this matter.  

Sincerely,  

AIR POLLUTION CONTROL PROGRAM  

Kendall B. Hale, P.E.  
New Source Review Unit Chief  

KBH: cwyl  

Enclosures  

c: St. Louis Regional Office  
PAMS File: 2006-11-0-12  
Permit Number: