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: 092018 - 003 Project Number: 2018-06-019
Installation Number: PORT-0781

Parent Company: Pace Construction Company
Parent Company Address: 1620 Woodson Road, St. Louis, MO 63114

Installation Name: Pace Construction Company- Malden Location
Installation Address: 3210 Federal Drive, Malden, MO 63863
Location Information: Dunklin County, S28, T23N, R10E

Application for Authority to Construct was made for:
New 450 tons/hr portable asphalt plant. 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 are applicable to this permit.

Prepared by
Jordan Hull
New Source Review Unit

Director or Designee
Department of Natural Resources
SEP 17 2018

Effective Date
STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Enforcement and Compliance Section of the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Enforcement and Compliance Section of the Department’s Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department’s regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department’s personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit using the contact information below.

Contact Information:
Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176
(573) 751-4817

The regional office information can be found at the following website:
http://dnr.mo.gov/regions/
GENERAL SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

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. Equipment Identification Requirement
   Pace Construction Company- Malden Location 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 asphalt plant.

2. Relocation of Portable Asphalt Plant
   A. Pace Construction Company- Malden Location shall not be operated at any location longer than 24 consecutive months except if the Site Specific Special Conditions of this portable plant, PORT-0781, contain a nonroad engine requirement limiting the portable plant at the site specific location to 12 consecutive months.
   B. A complete “Portable Source Relocation Request” application must be submitted to the Air Pollution Control Program prior to any relocation of this portable asphalt plant.
      1) If the portable asphalt plant is moving to a site previously permitted, and if the circumstances at the site have not changed, then the application must be received by the Air Pollution Control Program at least seven days prior to the relocation.
      2) If the portable asphalt plant is moving to a new site, or if circumstances at the site have changed (e.g. the site was only permitted for solitary operation and now another plant is located at the site), then the application must be received by the Air Pollution Control Program at least 21 days prior to the relocation. The application must include written notification of any concurrently operating plants.

3. Record Keeping Requirement
   Pace Construction Company- Malden Location shall maintain all records required by this permit for not less than five years and shall make them available to any Missouri Department of Natural Resources' personnel upon request.

4. Reporting Requirement
   Pace Construction Company- Malden Location shall report to the Air Pollution Control Program Compliance / Enforcement Section by mail at P.O. Box 176, Jefferson City, MO 65102 or electronically at AirComplianceReporting@dnr.mo.gov, no later than 10 days after any exceedances of the limitations imposed by this permit.
SITE SPECIFIC SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

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-0781
Site Name: Malden Location
Site Address: 3210 Federal Drive, Malden, MO 63863
Site County: Dunklin S28, T23N, R10E

1. Annual Emission Limit
   A. Pace Construction Company- Malden Location shall emit less than 15.0 tons of PM₁₀ in any 12-month period from the entire installation.

   B. Pace Construction Company- Malden Location shall demonstrate compliance with Special Condition 1.A using Attachment A or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.

2. Control Device Requirement-Baghouse
   A. Pace Construction Company- Malden Location shall control emissions from the drum dryer (EP-4) using a baghouse as specified in the permit application.

   B. The baghouse shall be operated and maintained in accordance with the manufacturer's specifications. The baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them.

   C. Replacement filters for the baghouse shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

   D. Pace Construction Company- Malden Location shall monitor and record the operating pressure drop across the baghouse 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. Pace Construction Company- Malden Location shall maintain a copy of the baghouse manufacturer's performance warranty on site.

F. Pace Construction Company- Malden Location shall maintain an operating and maintenance log for the baghouse 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.

3. Fuel Requirement-Drum Dryer and Asphalt Heater
   A. Pace Construction Company- Malden Location shall burn in distillate fuel oil #4 or #2 in their Drum Dryer (EP-4) during asphalt production. The distillate #4 or #2 oil shall have a sulfur content no higher than 0.8812 % or 8,812 ppm.
   C. Pace Construction Company- Malden Location shall demonstrate compliance with Special Condition 3.B by obtaining records of the fuel's sulfur content from the vendor for each shipment of fuel received or by testing each shipment of fuel for the sulfur content in accordance with the method described in 10 CSR 10-6.040 Reference Methods.
   D. Pace Construction Company- Malden Location shall keep the records required by Special Condition 3.C with the unit and make them available for Department of Natural Resources' employees upon request.

4. Nonroad Engine Requirement
   Pace Construction Company- Malden Location's engine shall not remain at one location within this site longer than 12 consecutive months in order for the engine to meet the definition of a nonroad engine as stated in 40 CFR 89.2. These engines shall be moved with its associated equipment at least once every 12 consecutive months at this site.

5. Record Keeping Requirement
   Pace Construction Company- Malden Location shall maintain all records required by this permit for not less than five years and make them available to any Missouri Department of Natural Resources' personnel upon request.
SITE SPECIFIC SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

6. Reporting Requirement
Pace Construction Company- Malden Location shall report to the Air Pollution Control Program, Compliance / Enforcement Section by mail to P.O. Box 176, Jefferson City, MO 65102 or by email at AirComplianceReporting@dnr.mo.gov, no later than 10 days after any exceedances of the limitations imposed by this permit.

7. Undocumented Haul Road Watering
A. Pace Construction Company- Malden Location PORT- 0781 shall water storage piles/haul roads whenever conditions exist which would cause visible fugitive emissions to enter the ambient air beyond the property boundary.

B. Watering may 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.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (6) REVIEW
Project Number: 2018-06-019
Installation ID Number: PORT-0781
Permit Number: 092018-003

Installation Address:
Pace Construction Company- Malden
3210 Federal Drive
Malden, MO 63863

Parent Company:
Pace Construction Company
1620 Woodson Road
St. Louis, MO 63114

Dunklin County, S28, T23N, R10E

PROJECT DESCRIPTION

Pace Construction Company is installing a new portable asphalt plant located in Dunklin County. It will be the only plant located at the Malden facility. The AL Mix UF 114 portable plant was manufactured in 2018 and has an MHDR 450 tph. The drum dryer is rated at 120 MMBtu/hr and will burn distillate fuel oil #4 with a sulfur content no greater than 0.8812% sulfur. The 1.5 MMBtu/hr asphalt heater and the MTU engine will burn ultra-low sulfur diesel.

The following table lists the new pieces of equipment associated with this project.

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Equipment Description</th>
<th>MHDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP1</td>
<td>Aggregate Bins</td>
<td>450 tph</td>
</tr>
<tr>
<td>EP2</td>
<td>Aggregate handling conveyor (2)</td>
<td>450 tph</td>
</tr>
<tr>
<td>EP3</td>
<td>Vibrating Screen</td>
<td>450 tph</td>
</tr>
<tr>
<td>EP4</td>
<td>Drum Dryer</td>
<td>450 tph</td>
</tr>
<tr>
<td>EP5</td>
<td>Plant Loadout</td>
<td>450 tph</td>
</tr>
<tr>
<td>EP6</td>
<td>Silo Loading</td>
<td>450 tph</td>
</tr>
<tr>
<td>EP7</td>
<td>Asphalt Heater</td>
<td>1.5 mmBTU/hr</td>
</tr>
<tr>
<td>EP11a</td>
<td>Storage Piles (Sand)</td>
<td>0.5 acre</td>
</tr>
<tr>
<td>EP11b</td>
<td>Storage Pile (Aggregate)</td>
<td>0.5 acre</td>
</tr>
<tr>
<td>EP11c</td>
<td>Storage Pile (RAP)</td>
<td>0.5 acre</td>
</tr>
<tr>
<td>EP12a</td>
<td>Haul Roads (Receiving)</td>
<td>724 feet</td>
</tr>
<tr>
<td>EP12b</td>
<td>Haul Roads (Sales/Finished Product)</td>
<td>407 feet</td>
</tr>
</tbody>
</table>

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 Dunklin County, an attainment/unclassifiable area for all criteria pollutants.

This installation is on the List of Named Installations found in 10 CSR 10-6.020(3) (B), Table 2. Fugitive emissions are counted toward major source applicability. However, Category 27 does not apply to the 100 tons per year major source level thresholds. Therefore, the major source threshold for this asphalt plant is 250 tons per year.

No permits have been issued to Pace Construction Company- Malden Location for PORT-0781 from the Air Pollution Control Program.

**TABLES**

The Table 2 below summarizes the emissions of this project. The potential emissions of the process equipment, which excluded emissions from haul roads and wind erosion, are not site specific and should not vary from site to site. This is a new installation so there are not existing actual emissions. The potential emissions of the application represent the emissions of all equipment and activities assuming continuous operation (8760 hours per year). Conditioned potential emissions account for the voluntary PM\textsubscript{10} annual emissions limit to avoid dispersion modeling requirements.

<table>
<thead>
<tr>
<th>Air Pollutant</th>
<th>De Minimis Level/SMAL</th>
<th>(^a)Potential Emissions of Process Equipment</th>
<th>Existing Actual Emissions</th>
<th>(^b)Potential Emissions of the Application</th>
<th>Conditioned Potential Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>25.0</td>
<td>130.97</td>
<td>N/A</td>
<td>771.65</td>
<td>41.03</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
<td>15.0</td>
<td>71.17</td>
<td>N/A</td>
<td>282.11</td>
<td>&lt;15.00</td>
</tr>
<tr>
<td>PM\textsubscript{2.5}</td>
<td>10.0</td>
<td>50.06</td>
<td>N/A</td>
<td>76.94</td>
<td>4.09</td>
</tr>
<tr>
<td>SO\textsubscript{x}</td>
<td>40.0</td>
<td>342.91</td>
<td>N/A</td>
<td>342.91</td>
<td>18.23</td>
</tr>
<tr>
<td>NO\textsubscript{x}</td>
<td>40.0</td>
<td>170.15</td>
<td>N/A</td>
<td>170.15</td>
<td>9.05</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>118.83</td>
<td>N/A</td>
<td>118.93</td>
<td>6.32</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>35.01</td>
<td>N/A</td>
<td>35.01</td>
<td>1.86</td>
</tr>
<tr>
<td>H\textsubscript{2}S</td>
<td>10.0</td>
<td>9.95</td>
<td>N/A</td>
<td>9.95</td>
<td>0.529</td>
</tr>
<tr>
<td>GHG (CO\textsubscript{2}e)</td>
<td>N/A</td>
<td>88,407.06</td>
<td>N/A</td>
<td>88,407.16</td>
<td>4,700.60</td>
</tr>
<tr>
<td>GHG (mass)</td>
<td>N/A</td>
<td>88,031.38</td>
<td>N/A</td>
<td>88,031.38</td>
<td>4,680.62</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>10.0/2.0\textsuperscript{c}</td>
<td>6.45</td>
<td>N/A</td>
<td>6.45</td>
<td>0.34</td>
</tr>
<tr>
<td>CH\textsubscript{2}O</td>
<td>N/A</td>
<td>88,031.38</td>
<td>N/A</td>
<td>88,031.38</td>
<td>4,680.62</td>
</tr>
<tr>
<td>2- methylnaphthalene\textsuperscript{d}</td>
<td>10.0/0.01\textsuperscript{c}</td>
<td>0.36</td>
<td>N/A</td>
<td>0.36</td>
<td>0.02</td>
</tr>
<tr>
<td>Lead Compounds</td>
<td>10.0/0.01\textsuperscript{c}</td>
<td>0.03</td>
<td>N/A</td>
<td>0.03</td>
<td>2.0 x 10\textsuperscript{-3}</td>
</tr>
<tr>
<td>Total HAPs</td>
<td>25.0</td>
<td>20.56</td>
<td>N/A</td>
<td>20.56</td>
<td>1.09</td>
</tr>
</tbody>
</table>

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

\(^a\)Excludes site specific haul road and storage pile emissions

\(^b\)Includes site specific haul road and storage pile emissions

\(^c\)SMAL

\(^d\)2-methylnaphthalene is a member of the Polycyclic Organic Matter (POM) HAP group.
Table 3 summarizes the ambient air quality impact analysis. An AAQIA is required for pollutants if their emissions exceed their respective de minimis or screening model action level (SMAL). The AAQIA was performed using the EPA modeling software AERSCREEN. The maximum modeled impact is the impact of each pollutant when the plant is operating continuously. The 24-hour limited impacts and daily limit are based on compliance with RAL for 2-methylnaphthalene.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>RAL (µg/m³)</th>
<th>Averaging Time</th>
<th>Maximum Modeled Impact (µg/m³)</th>
<th>Limited Impact (µg/m³)</th>
<th>Background (µg/m³)</th>
<th>Daily Limit (tons/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-methylnaphthalene</td>
<td>23</td>
<td>24-hour</td>
<td>0.38</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2-methylnaphthalene</td>
<td>2.3</td>
<td>Annual</td>
<td>0.0003</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*a Modeled impact at maximum capacity with controls

b 2-methylnaphthalene is a member of the polycyclic organic matter (POM) HAP group.

The plant's drum dryer (EP-4) was modeled using the AERSCREEN screen modeling software. The stack characteristic entered into the modeled are listed in Table 4.

<table>
<thead>
<tr>
<th>Equipment Description</th>
<th>Stack Height (m)</th>
<th>Stack Inside Diameter (m)</th>
<th>Stack Gas Exit Velocity (m/s)</th>
<th>Stack Gas Exit Temperatu re (K)</th>
<th>Dispersion Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drum Dryer (EP-4)</td>
<td>9.14</td>
<td>0.99</td>
<td>48.09</td>
<td>377.5</td>
<td>Rural</td>
</tr>
</tbody>
</table>

EMISSIONS CALCULATIONS

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

Emissions from the drum mix asphalt plant:
- Calculated using emission factors from AP-42 Section 11.1 "Hot Mix Asphalt Plants," April 2004.
- SOx emissions were calculated using the SO₂ and SO₃ emission factors from AP-42 Section 1.3 "Fuel Oil Combustion," September 1998 and assuming half of the sulfur up to 0.1 pound per ton of product is absorbed into the product.
- The asphalt plant is controlled by a baghouse, so the fabric filter controlled emission factor was used to calculate all filterable emissions.
- Emissions from plant load-out were calculated using predictive equations found in AP-42 Table 11.1-14. Default values were used for asphalt volatility and mix temperature.

Emissions from the asphalt heater:
- Calculated using emission factors from AP-42 Section 1.3.
Emissions from aggregate handling:
- The uncontrolled emission factors were used because the inherent moisture content of the crushed rock is less than 1.5% by weight.

Emissions from haul roads and vehicular activity areas:
- Calculated using the predictive equation from AP-42 Section 13.2.2 “Unpaved Roads,” November 2006.
- A 50% control efficiency for PM and 41% for PM$_{10}$ and 22% for PM$_{2.5}$ were applied to the emission calculations for undocumented haul road watering.

Emissions from storage piles:
- Load-in and load-out of storage piles were calculated using the predictive equation from AP-42 Section 13.2.4.
- The moisture content of the aggregate is by default 0.7% 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.”

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. The conditioned potential emissions include emissions from sources that will limit their production to ensure compliance with the annual PM$_{10}$ emission limit of 15.0 tons per year for plants in order to avoid refined modeling according to 10 CSR 10-6.060 (6)(B)3. Potential emissions of PM are above de minimis but below major source levels. There are no modeling requirements for PM.

APPLICABLE REQUIREMENTS

Pace Construction Company- Malden Location shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved.

GENERAL REQUIREMENTS

- *Operating Permits*, 10 CSR 10-6.065 is not required because this is a portable plant.
- *Start-Up, Shutdown, and Malfunction Conditions*, 10 CSR 10-6.050
- Submission of Emission Data, Emission Fees and Process Information, 10 CSR 10-6.110.

- 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 10-6.165

SPECIFIC REQUIREMENTS

- Restriction of Emission of Particulate Matter From Industrial Processes, 10 CSR 10-6.400 does not apply because the drum dryer is controlled by a baghouse. All other sources are fugitive.

- 40 CFR 60 Subpart I, "Standards of Performance for Hot Mix Asphalt Facilities" applies to the equipment.

- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPS) or National Emission Standards for Hazardous Air Pollutants for Source Categories (MACTS) apply to the proposed equipment.

- Control of Sulfur Dioxide Emissions, 10 CSR 10-6.261 does apply but this plant complies by the usage of distillate fuel oil #4 and #2 fuel with a sulfur content less than 8,509 ppm.

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, it is recommended that this permit be granted with special conditions.

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated June 10, 2018, received June 11, 2018, designating Pace Construction Company as the owner and operator of the installation.
Attachment A – PM$_{10}$ Compliance Worksheet
Pace Construction Company- Malden Location PORT-0781
Project Number: 2018-06-ijl~2018-003

This sheet covers the period from _______ to _______.
(month, year)  (month, year)

<table>
<thead>
<tr>
<th>Month</th>
<th>Production (tons)</th>
<th>Emission Factor (lb/ton)</th>
<th>Monthly Emissions$^1$ (lbs)</th>
<th>Monthly Emissions$^2$ (tons)</th>
<th>12-Month Total Emissions$^3$ (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>26,000</td>
<td>0.1431</td>
<td>3,720.6</td>
<td>1.86</td>
<td>$1.86 + 11$ previous months</td>
</tr>
</tbody>
</table>

$^1$Multiply the monthly production by the emission factor.

$^2$Divide the monthly emissions (lbs) by 2000.

$^3$Add the monthly emissions (tons) to the sum of the monthly emissions from the previous eleven months and add SSM emission from the same 12 month period as reported to the Air Pollution Control Program in accordance with 10 CSR 10-6.050. A total of less than 15.0 tons of PM$_{10}$ per consecutive 12 months is necessary for compliance.
APPENDIX A

Abbreviations and Acronyms

% ............... percent
°F ............... degrees Fahrenheit
acfm ........... actual cubic feet per minute
BACT ............ Best Available Control Technology
BMPs .......... Best Management Practices
Btu ............ British thermal unit
CAM .......... Compliance Assurance Monitoring
CAS ............ Chemical Abstracts Service
CEMS .......... Continuous Emission Monitor System
CFR ......... Code of Federal Regulations
CO ............. carbon monoxide
CO₂ ........... carbon dioxide
CO₂e ........... carbon dioxide equivalent
COMS ......... Continuous Opacity Monitoring System
CSR ............ Code of State Regulations
dscf ........... dry standard cubic feet
EIQ .......... Emission Inventory Questionnaire
EP ............. Emission Point
EPA ......... Environmental Protection Agency
EU ............ Emission Unit
fps ........... feet per second
ft ............ feet
GACT ......... Generally Available Control Technology
GHG ........... Greenhouse Gas
gpm .......... gallons per minute
gr ............ grains
GWP ......... Global Warming Potential
HAP .......... Hazardous Air Pollutant
hr ........... hour
hp ........... horsepower
lb ........... pound
lbs/hr ......... pounds per hour
MACT ......... Maximum Achievable Control Technology
µg/m³ ......... micrograms per cubic meter
m/s ........... meters per second
Mgal ......... 1,000 gallons
MW .......... megawatt
MHDR ....... maximum hourly design rate
MMBtu .... Million British thermal units
MMCF ....... million cubic feet
MSDS .......... Material Safety Data Sheet
NAAQS ....... National Ambient Air Quality Standards
NESHAPs National Emissions Standards for Hazardous Air Pollutants
NOₓ .......... nitrogen oxides
NSPS .......... New Source Performance Standards
NSR .......... New Source Review
PM ......... particulate matter
PM₁₀ ....... particulate matter less than 2.5 microns in aerodynamic diameter
PM₁₀₀ ...... particulate matter less than 10 microns in aerodynamic diameter
ppm .......... parts per million
PSD .......... Prevention of Significant Deterioration
PTE .......... potential to emit
RACT ....... Reasonable Available Control Technology
RAL .......... Risk Assessment Level
SCC .......... Source Classification Code
scfm .......... standard cubic feet per minute
SDS .......... Safety Data Sheet
SIC ............ Standard Industrial Classification
SIP .......... State Implementation Plan
SMAL .......... Screening Model Action Levels
SOₓ .......... sulfur oxides
SO₂ .......... sulfur dioxide
SSM .......... Startup, Shutdown & Malfunction
tph .......... tons per hour
tpy .......... tons per year
VMT .......... vehicle miles traveled
VOC .......... Volatile Organic Compound
NOTICE: This spreadsheet is for your use only and should be used with caution. MoDNR does not guarantee the accuracy of the information it contains. This spreadsheet is subject to continual revision and updating. It is your responsibility to be aware of the most current, accurate and complete information available. MoDNR is not responsible for errors or omissions in this spreadsheet. Submittal of the information contained in this spreadsheet (workbook) does not relieve the responsible official of the certification statement signed on the first page of the application.

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<th>Pollutant</th>
<th>Potential Emissions of Process Equipment (tons/yr)</th>
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<th>Allowable Emissions for 466 hours per year (tons/yr)</th>
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Maximum hourly design rate (tons/hr) 450
Distance to property boundary (ft) 75

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<th>Tons of product per day</th>
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<tr>
<td>Tons of product per year</td>
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SEP 17 2018

Mr. Jeremy Polman
Manager
Pace Construction Company- Malden Location
1620 Woodson Road
St. Louis, MO 63114

RE: New Source Review Permit - Project Number: 2018-06-019

Dear Mr. Polman:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your amended operating permit 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.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: http://dnr.mo.gov/regions/. The online CAV request can be found at http://dnr.mo.gov/cav/compliance.htm.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission, whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: www.oa.mo.gov/ahc.
If you have any questions regarding this permit, please do not hesitate to contact Jordan Hull, at the Department of Natural Resources’ Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

Enclosures

c: Southeast Regional Office
   PAMS File: 2018-06-019

Permit Number:
<table>
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<tr>
<th>Emission Point</th>
<th>Stack Height (meters)</th>
<th>Stack Inside Diameter (meters)</th>
<th>Stack Gas Exit Velocity (m/s)</th>
<th>Stack Gas Exit Temp. (K)</th>
<th>Distance to Ambient Boundary (m)</th>
<th>Maximum 1-hour Conc. (µg/m$^3$)</th>
<th>Scaled 3-hour Conc. (µg/m$^3$)</th>
<th>Scaled 8-hour Conc. (µg/m$^3$)</th>
<th>Scaled 24-hour Conc. (µg/m$^3$)</th>
<th>Scaled Annual Conc. (µg/m$^3$)</th>
<th>Distance of Maximum Impact (m)</th>
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**Maximum impact between boundary and 10,000 meters**

**Impact at the ambient boundary**