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: 072019-001
Project Number: 2019-04-043
Installation ID: PORT-0790

Parent Company: A.E. Simpson Construction
Parent Company Address: 51 County Highway 316, Scott City, MO 63780
Installation Name: A.E. Simpson Construction Company
Installation Address: East Outer Road, Scott City, MO 63780
Location Information: Scott County, S36 T30N R13E

Application for Authority to Construct was made for:
Portable rock crusher. 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.

Darryl A. Boyce
Director or Designee
Department of Natural Resources
JUL 01 2019
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 sources(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 to the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (3)(E) "Conditions required by permitting authority."

1. Equipment Identification Requirement
   A.E. Simpson Construction Company 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.

2. Relocation of Portable Rock Crushing Plant
   A. A.E. Simpson Construction Company 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, 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.

3. Record Keeping Requirement
   A.E. Simpson Construction Company 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
   A.E. Simpson Construction Company 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.
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 (3)(E). "Conditions required by permitting authority."

PORT ID Number: PORT-0790
Site Name: East Outer Road Site
Site Address: East Outer Road, Scott City, MO 63780
Site County: Scott S36 T30N R13E

1. Annual Emission Limit
   A. A.E. Simpson Construction Company shall emit less than 15.0 tons of PM\textsubscript{10} in any 12-month period from the entire installation which consists of the equipment and activities listed in Table 1. The SSM emissions as reported to the Air Pollution Control Program’s Compliance/Enforcement Section in accordance with the requirements of 10 CSR 10-6.050 Start-Up, Shutdown, and Malfunction Conditions shall be included in the limit.

   B. A.E. Simpson Construction Company 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. Best Management Practices (BMPs) Requirement
   A.E. Simpson Construction Company shall control fugitive emissions from all of the haul roads at this site by performing Best Management Practices as defined in Attachment AA.

3. Undocumented Watering Requirement
   A.E. Simpson Construction Company shall apply a water spray on all vehicular activity areas whenever conditions exist that would allow visible emissions from these sources to leave the property.

4. Primary Equipment Requirement
   A.E. Simpson Construction Company shall process all rock through the primary crusher (EP-02). Bypassing the primary crusher is prohibited.

5. Nonroad Engine Requirement
   A.E. Simpson Construction Company’s engine shall not remain at one location within this site longer than 12 consecutive months in order for the engine (NT 855 Cummins 400 HP #11724797) 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.
SITE SPECIFIC SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

6. Record Keeping Requirement
   A.E. Simpson Construction Company shall maintain all records required by this permit for not less than five years and make them available to any Missouri Department of Natural Resources' personnel upon request.

7. Reporting Requirement
   A.E. Simpson Construction Company 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.
PROJECT DESCRIPTION

A.E. Simpson Construction plans to crush stone near Pave Stone in Scott City, Missouri in Scott County. The portable Eagle Model 1000, S/N 11061 is rated at 150 tons per hour and consisting of a screen, two conveyors and two stackers (see Table 1). It will be powered by a NT 855 Cummins 400 HP #11724797 diesel engine plant and meets the definition of non-road engine as defined in 40 CFR 89.2 (1)(i). Therefore, the emissions of the engine were not included. Although a portable plant is allowed to operate at a site for 24 consecutive months, the diesel engine is only allowed to operate at this site for 12 consecutive months in order for the diesel engine to be classified as a non-road engine.

Table 1: Equipment List

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Equipment List</th>
<th>MHDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-01</td>
<td>Loading into Grizzly</td>
<td>150 tph</td>
</tr>
<tr>
<td>EP-02</td>
<td>Primary Crusher Eagle 1000</td>
<td>150 tph</td>
</tr>
<tr>
<td>EP-03</td>
<td>Underconveyor</td>
<td>150 tph</td>
</tr>
<tr>
<td>EP-04</td>
<td>Conveyor</td>
<td>150 tph</td>
</tr>
<tr>
<td>EP-05</td>
<td>Screen</td>
<td>150 tph</td>
</tr>
<tr>
<td>EP-06</td>
<td>Stackers (2 total)</td>
<td>150 tph</td>
</tr>
<tr>
<td>EP-07a</td>
<td>Load-In Stockpile</td>
<td>150 tph</td>
</tr>
<tr>
<td>EP-07b</td>
<td>Load-out Stockpile</td>
<td>150 tph</td>
</tr>
<tr>
<td>EP-07c</td>
<td>Vehicular Activity (unpaved 1,800 feet)</td>
<td>7.2 VMT/hr</td>
</tr>
<tr>
<td>EP-07d</td>
<td>Wind Erosion</td>
<td>18.0 acres</td>
</tr>
<tr>
<td>EP-08</td>
<td>Haul Roads to highway (paved 1,200 feet)</td>
<td>4.1 VMT/hr</td>
</tr>
</tbody>
</table>

This installation is located in Scott County, attainment/unclassified area for all criteria pollutants.
This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].

No permits have been issued to A.E. Simpson Construction Company from the Air Pollution Control Program.

**TABLES**

The table 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. There are no existing actual emissions since this is a new portable plant. 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 de minimis PM$_{10}$ annual emission limit.

**Table 1: Emissions Summary (tons per year)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>25.0</td>
<td>25.89</td>
<td>N/A</td>
<td>398.14</td>
<td>47.05</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>9.46</td>
<td>N/A</td>
<td>126.94</td>
<td>&lt;15.0</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>10.0</td>
<td>1.29</td>
<td>N/A</td>
<td>16.84</td>
<td>1.99</td>
</tr>
<tr>
<td>SO$_x$</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Total HAPs</td>
<td>25.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

N/A = Not Applicable

*a* Excludes site specific storage pile emissions and haul roads

*b* Includes site specific haul road and storage pile emissions

**EMISSIONS CALCULATIONS**

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

Emissions from the rock-crushing equipment:

- The uncontrolled emission factors were used because the inherent moisture content of the crushed rock is less than 1.5 % by weight.
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 for vehicular activity area.
• A 50% control efficiency for PM and PM$_{10}$ and a 41% control efficiency for PM$_{2.5}$ were applied to the emission calculations for the use of undocumented watering for vehicular activity area.
• Calculated using the predictive equation from AP-42 Section 13.2.1 "Paved Roads," January 2011 for shipping haul road.

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 less than 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."

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. Potential emissions of PM are above de minimis levels but remain below major levels.

APPLICABLE REQUIREMENTS

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

- Submission of Emission Data, Emission Fees and Process Information, 10 CSR 10-6.110.

- An Operating Permit is not required because this is a portable plant.

- Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin, 10 CSR 10-6.170

- Restriction of Emission of Visible Air Contaminants, 10 CSR 10-6.220

- Restriction of Emission of Odors, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS

- 40 CFR 60 Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants" does not apply to the equipment because it is rated at 150 tph and therefore exempt as stated in §60.670(c)(2) in Subpart OOO.

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

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, Construction Permits Required, it is recommended that this permit be granted with special conditions.

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated April 22, 2019, received April 22, 2019, designating A.E. Simpson Construction as the owner and operator of the installation.
Attachment A: PM$_{10}$ 12-Month Rolling Total Emissions Tracking Sheet  
A.E. Simpson Construction Company PORT-0790  
Project Number: 2019-04-043  
Permit Number: 072019-001

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

<table>
<thead>
<tr>
<th>Month</th>
<th>Production (tons)</th>
<th>PM$_{10}$ Composite Emission Factor (lb/ton)</th>
<th>Monthly PM$_{10}$ Emissions (lbs)</th>
<th>Startup, Shutdown and Malfunction PM$_{10}$ Emissions (lbs)</th>
<th>Monthly PM$_{10}$ Emissions (tons)</th>
<th>12-Month Rolling Total Emissions (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>20,000</td>
<td>0.1932</td>
<td>3,864</td>
<td>0.0</td>
<td>1.9</td>
<td>1.9 + 11 previous months</td>
</tr>
</tbody>
</table>

1 Multiply the monthly production by the PM$_{10}$ composite emission factor.  
2 As reported to the Air Pollution Control Program's Compliance/Enforcement Section according to the provisions of 10 CSR 10-6.050 for the month.  
3 Add the monthly PM$_{10}$ emissions plus the SSM emissions from the same time period and divide by 2000 and  
4 Add the monthly emissions (tons) to the sum of the monthly emissions from the previous eleven months. A total of less than 15.0 tons of PM$_{10}$ per consecutive 12 months is necessary for compliance.
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 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 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, volume of water application and total surface area of active haul roads 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.
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
PM₂.₅ .... particulate matter less than 2.5 microns in aerodynamic diameter
PM₁₀ ....... 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
JUL 01 2019

Mr. Earl Simpson
Owner
A.E. Simpson Construction Company
51 County Highway 316
Scott City, MO 63780

RE: New Source Review Permit - Project Number: 2019-04-043;
    Installation Number: PORT-0790

Dear Mr. Simpson:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions and your new source review permit are necessary for continued compliance. In addition, please note that A.E. Simpson Construction Company cannot operate with any other plants that have ambient impact limits based on the Air Pollution Control Program's nomographs. Please refer to the permits of any plant that you are operating with to see if their respective permits contain an ambient impact limit. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

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

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date the administrative hearing commission received it.
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, please do not hesitate to contact Kathy Kolb, at the department’s Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

SH:kk

Enclosures

c: Southeast Regional Office
PAMS File: 2019-04-043

Permit Number: 072019-001