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: 06 2 0 1 9 - 0 0 6  Project Number: 2019-04-019
Installation Number: 510-1421

Parent Company: PSC Metals, LLC
Parent Company Address: 5875 Landerbrook Drive, Suite 200, Mayfield Heights, OH 44124
Installation Name: PSC Metals, LLC
Installation Address: 3620 North Hall Street, St. Louis, MO 63147
Location Information: St. Louis City County

Application for Authority to Construct was made for:
Installation of a new shredder system, separation equipment, and associated conveyance system. 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.

Director or Designee
Department of Natural Resources

JUN 12 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 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/
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.”

PSC Metals, LLC
County of St. Louis City

1. Polychlorinated Biphenyls (PCBs) Emission Limitations
   A. PSC Metals, LLC shall emit less than 0.009 tons of PCBs in any consecutive 12-month period from the Shredder (EP-05).
   B. Attachment A or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Condition 1.A.

2. Documented Haul Road Watering
   A. PSC Metals, LLC shall control dust from all haul roads at this site using water or surfactant spray consistently and correctly at all times to prevent visible fugitive emissions from entering the ambient air beyond the property boundary. The following conditions apply to haul road watering:
      1) The water application rate shall be 100 gallons per 1000 square feet at least once every day.
      2) A quarter inch or more rainfall during the preceding 24 hours shall substitute for one daily water application.
      3) Watering/surfactant spraying 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.
   B. PSC Metals, LLC shall keep the following records on file and available for inspection:
      1) A daily log initialed by the responsible facility operator of roads watered and quantity of water/chemical application used, or notation that there was a quarter inch or greater rainfall within the past 24 hours or that the facility was not in operation.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

2) Water tank size, total area of roads to be watered, and the resultant number of fills necessary to accomplish the required application rate.

3) Records of watering equipment breakdowns and repairs.

3. Record Keeping and Reporting Requirements

A. PSC Metals, LLC shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources’ personnel upon request.

B. PSC Metals, LLC shall report to the Air Pollution Control Program’s Compliance/Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or by email at AirComplianceReporting@dnr.mo.gov, no later than 10 days after the end of the month during which any record required by this permit shows an exceedance of a limitation imposed by this permit.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW
Project Number: 2019-04-019
Installation ID Number: 510-1421
Permit Number: 062019-006

Installation Address:
PSC Metals, LLC
3620 North Hall Street
St. Louis, MO 63147

Parent Company:
PSC Metals, LLC
5875 Landerbrook Drive, Suite 200
Mayfield Heights, OH 44124

County of St. Louis City

REVIEW SUMMARY

- PSC Metals, LLC has applied for authority to install a new shredder system, separation equipment, and associated conveyance system.

- The application was deemed complete on May 17, 2019.

- HAP emissions are expected from the proposed equipment. Anticipated HAPs are listed in the potential emissions table.

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

- None of the NESHAPs apply to this installation.


- No air pollution control equipment is being used in association with the new equipment. Documented watering is being used to control emissions from haul roads.

- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. The emissions increases of the project are less than de minimis for all criteria pollutants. Potential emissions of PCBs are conditioned below the SMAL levels.

- This installation is located in the country of St. Louis City, a nonattainment area for the 8-hour ozone standard and an attainment area for all other criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. Due to the nonattainment status of the area, the major source level for ozone precursors (NOx and VOC) is 100 tons per year each. The installation's major source level is 250 tons per year for all other regulated NSR pollutants. Fugitive emissions are not counted toward major source applicability.

- Ambient air quality modeling was not performed since the emissions increases are below de minimis levels.

- Emissions testing is not required for the equipment as a part of this permit.

- No Operating Permit is required for this installation.

- Approval of this permit is recommended with special conditions.

**INSTALLATION DESCRIPTION**

PSC Metals, LLC owns and operates a scrap metal recycling facility in St. Louis. The scrap metal is delivered to the site by truck and rail car. Scrap metal is stockpiled and processed mainly by shredding. The products are staged in storage piles of uniform size and material as they are generated from the various stages of the shredding, cutting, and shearing operations. Shearing or torch cutting is occasionally used. Outbound scrap metal is shipped off site by truck and rail car.

Scrap metal comprised of aluminum, miscellaneous sheet steel, automobiles, and other metal parts, is put into a stockpile near the feed conveyor (EP15). A crane is used to place the scrap from the pile onto a metal in-feed chute (EP02). The metal is transferred from the in-feed chute into the shredding unit. The shredder is equipped with a Smart Water Injection System (SWIS), which sprays water into the shredder box to suppress dust emissions. The water addition system injects water at a rate based on the amperage draw of the shredder motor to ensure particulate dampening, but not in quantities sufficient to create water runoff. The heat generated during shredding turns the water to saturated steam. The shredding unit is designated as EP05.

Following the shredder is an Undermill Oscillator. This unit receives nonhomogeneous product from the shredder and transfer them to Conveyor C001 after applying high amplitude and low frequency motion to make the material more homogeneous.

Conveyor C001 moves the shredded material to a dual system of shaker pans and drum magnets. Shaker Pan 1 removes small debris to Conveyor C005 (EP09) which transfers to debris to the Auto Shredder Residue (ASR) Stockpile (EP17).

The larger pieces continue to Drum Magnet 1 to separate ferrous material from nonferrous material. The ferrous material passes through Shaker Pan 2 where the smaller debris falls onto Conveyor C005 (EP23) to deposit onto the ASR Stockpile (EP17). The larger ferrous materials move onto Drum Magnet 2 for further separation from nonferrous contaminants.
Nonferrous material from Drum Magnet 2 is picked up by Conveyor C002 (EP24), the sorting conveyor. Nonferrous materials are handpicked from Conveyor C002 and passed through the Z-Box.

Within the Z-Box, a stream of air flows counter to the shredded nonferrous material and carries the lighter material to an inherent cyclone. The Z-Box system is equipped with a damper (EP06). The majority of air recirculates back into the Z-Box system. The material in the Z-Box is deposited onto Conveyor C008 (EP16), and then to the ASR Stockpile (EP08).

Ferrous material travels from Conveyor C002, the ferrous sorting conveyor, and continues into the picking station where metal is hand sorted, as needed, and moved onto Conveyor C003 (EP10), the ferrous stacking conveyor. Ferrous metal is transferred from Conveyor C003 to Conveyor C004 (EP24), another subsequent stacking conveyor, to the FE Stockpile (EP11).

The installation occasionally performs torch cutting (EP20) and metal shearing (EP21). Torch cutting utilizes oxygen and propane gas to cut scrap metal. Shearing involves the use of a mobile shear where metal is cut using a shear attachment on a crane.

No permits have been issued to PSC Metals, LLC from the Air Pollution Control Program. Previous permitting actions, via Source Registrations, were issued by the City of St. Louis. Source Registrations are not state permits and therefore, are not federally enforceable.

PROJECT DESCRIPTION

This project is the replacement of the current shredder, Z-Box/Cyclone, and associated conveyance systems with new units. The new system will have an increased maximum hourly design rate, therefore also increasing the emissions from the modified conveyors, storage piles, and haul roads. The metal shearing, torch cutting, storage tanks operations are not affected by the increased capacity of the shredder system. The shearing and cutting are separate operations from the shredding. All emission units at the installation are listed in the following table:

<table>
<thead>
<tr>
<th>EP#</th>
<th>Description</th>
<th>MHDR</th>
<th>Status in this Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP02</td>
<td>Transfer to Metal In-Feed Conveyor</td>
<td>112 tons/hr</td>
<td>Modified</td>
</tr>
<tr>
<td>EP05</td>
<td>Shredder</td>
<td>112 tons/hr</td>
<td>New</td>
</tr>
<tr>
<td>EP06</td>
<td>Z-Box/Cyclone Damper Exhaust</td>
<td>112 tons/hr</td>
<td>New</td>
</tr>
<tr>
<td>EP07</td>
<td>Transfer from Undermill Oscillator onto Conveyor C001</td>
<td>112 tons/hr</td>
<td>Modified</td>
</tr>
<tr>
<td>EP08</td>
<td>Transfer from Conveyor C006 onto ASR Stockpile</td>
<td>3.4 tons/hr</td>
<td>No change</td>
</tr>
<tr>
<td>EP09</td>
<td>Transfer from Shaker Pan 1 to Conveyor C005</td>
<td>22.4 tons/hr</td>
<td>Modified</td>
</tr>
<tr>
<td>EP10</td>
<td>Transfer from Conveyor C002 to ASR Stockpile</td>
<td>81.7 tons/hr</td>
<td>Modified</td>
</tr>
<tr>
<td>EP#</td>
<td>Description</td>
<td>MHDR</td>
<td>Status in this Project</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td></td>
<td><strong>Conveyor C003</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP11</td>
<td>Transfer from Conveyor C004 onto FE Stockpile</td>
<td>81.7 tons/hr</td>
<td>Modified</td>
</tr>
<tr>
<td>EP15</td>
<td>Transfer to Scrap Stockpile</td>
<td>112 tons/hr</td>
<td>Modified</td>
</tr>
<tr>
<td>EP16</td>
<td>Transfer from Z-Box onto Conveyor C006</td>
<td>3.4 tons/hr</td>
<td>No change</td>
</tr>
<tr>
<td>EP17</td>
<td>Transfer from Conveyor C005 onto ASR Stockpile</td>
<td>30.3 tons/hr</td>
<td>Modified</td>
</tr>
<tr>
<td>EP20</td>
<td>Torch Cutting, 4 torches</td>
<td>2.14 gallon propane/hour each and 2.3 tons material/hr each.</td>
<td>No change</td>
</tr>
<tr>
<td>EP21</td>
<td>Metal Shearing</td>
<td>8.9 tons/hr</td>
<td>No change</td>
</tr>
<tr>
<td>EP22</td>
<td>Haul Roads-Shipping and Receiving</td>
<td>112 tons/hr</td>
<td>Modified</td>
</tr>
<tr>
<td>EP23</td>
<td>Transfer from Shaker Pan 2 to Conveyor C005</td>
<td>4.5 tons/hr</td>
<td>New</td>
</tr>
<tr>
<td>EP24</td>
<td>Transfer from Conveyor C003 to Conveyor C004</td>
<td>81.7 tons/hr</td>
<td>New</td>
</tr>
<tr>
<td>EP25</td>
<td>Transfer from Drum Magnet 2 onto Conveyor C002</td>
<td>85.1 tons/hr</td>
<td>New</td>
</tr>
<tr>
<td>EP26</td>
<td>Gasoline Tank</td>
<td>100 gallon capacity</td>
<td>No change</td>
</tr>
<tr>
<td>EP27</td>
<td>Diesel Tank</td>
<td>8,000 gallon capacity</td>
<td>No change</td>
</tr>
<tr>
<td>EP28</td>
<td>Haul Roads-Internal Traffic</td>
<td>112 tons/hr</td>
<td>Modified</td>
</tr>
<tr>
<td>EP29</td>
<td>Transfer from FE Stockpile to Truck</td>
<td>81.7 tons/hr</td>
<td>Modified</td>
</tr>
<tr>
<td>EP30</td>
<td>Transfer from ASR Stockpile to Truck</td>
<td>3.4 tons/hr</td>
<td>No change</td>
</tr>
<tr>
<td>EP31</td>
<td>Non-Shredded Material Handling (Receiving Stockpile, Intermediate Stockpile, and Truck Loading)</td>
<td>51.36 tons/hr</td>
<td>No change</td>
</tr>
<tr>
<td>EP32</td>
<td>Transfer to Intermediate Pile</td>
<td>28 tons/hr</td>
<td>No change</td>
</tr>
</tbody>
</table>

**EMISSIONS/CONTROLS EVALUATION**

**Shredder Emissions**

Shredder (EP05) emissions factors are sourced from the “Title V Applicability Workbook” published by The Institute of Scrap Recycling Industries (ISRI) in February 1996. Particulate emissions (PM, PM₁₀, and PM₂.₅) are sourced from Table D-10F, and VOC and HAP emissions are sourced from Table D-11F. Both tables represent emissions for an uncontrolled dry shredder processing feed mix of approximately 75% auto bodies and 25% mixed scrap and white goods. The tested sources underwent a defluidizing process, where gasoline, radiator fluid, and other fluids are drained prior to shredding. This feed mix and defluidizing process are similar to operations at PSC Metals. If PSC Metals should wish to discontinue or change the defluidizing process, a
re-evaluation of this permit will be necessary. These emission factors are considered conservative, as they are for uncontrolled emissions from dry material. The proposed shredder uses a SWIS to reduce particulate emissions. However, the amount of reduction is not currently quantified nor included in the emissions for this permit.

**Z-Box Emissions:**
Z-Box (EP06) emission factors are sourced from the same ISRI report cited above. Particulate emissions (PM, PM$_{10}$, and PM$_{2.5}$) are sourced from Table D-11A. The tested unit has a damp feed mix, cyclone, and a bleed off release. This is similar to the proposed equipment at PSC Metals.

**Conveyance Emissions:**
Conveyance potential emissions were calculated using the drop point equation methodology presented in AP-42, Section 13.2.4. *Aggregate Handling and Storage Piles* (November 2006), with a material moisture content of 7% and a mean wind speed of 9.7 mph, sourced from AP-42, Section 7.1, *Organic Liquid Storage Tanks* (November 2006) for St. Louis. The seven percent (7%) moisture content is based off process knowledge for material stored outside. This project consists of new, modified, and existing conveyors.

**Miscellaneous Emissions:**
Haul road potential emissions were calculated using the methodology presented in AP-42, Section 13.2.2 *Unpaved Roads* (November 2006). The calculations assumed a silt content of six percent (6%), 110 rain days, with 84 tons/hour of production for the existing shredder and 112 tons/hour of production for the new shredder. The existing shredder will be removed as part of this project, but the potential emissions are used for the pre-project potentials evaluation. For Haul Roads-Shipping and Receiving (EP22), an average loading weight of 20 tons and a road length of 0.3 miles was used. Haul Roads-Internal Traffic (EP28) is used to account for crane and front end loader operations. For crane operations, an average loading weight of 33.5 tons was used, and for front end loader operations an average loading weight of 3 tons was used. A road length of 0.15 miles was used for both crane and front loader operations. The installation has agreed to perform documented haul road watering, and control efficiencies of 90% for PM and PM$_{10}$, and 74% for PM$_{2.5}$ have been included in this permit.

Torch cutting creates emissions by the combustion of propane and the cutting process. Propane combustion potential emissions are based on emission factors from webFIRE for SCC 10201002, and greenhouse gas emissions from Part 98, Tables C-1 and C-2. Cutting process emissions are based on AP-42, Section 12.5 *Iron and Steel Production* (October 1986), Table 12.5-1 for scarfing. Metal shearing emissions are also based on this same emission factor. These operations are not affected by this project, as they are separate operations from the shredding. Emissions are included in the installation wide total in the table below.

The following table shows the emissions summary of the installation and this project. The existing potential emissions of the installation include all emission units prior to this project. The conditioned emissions increase reflects the increase of emissions from this
For each new and modified unit, see the calculations spreadsheet for additional information. Units that experienced no changes in this project are not included. Emissions decreases and netting were also not included. Potential emissions of the installation reflect all emission units after this project and the control efficiencies for the haul roads.

Table 3: Emissions Summary (tpy)

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>25.0</td>
<td>NR</td>
<td>343.71</td>
<td>5.51</td>
<td>88.28</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>3.82</td>
<td>108.87</td>
<td>4.77</td>
<td>41.75</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>10.0</td>
<td>3.26</td>
<td>31.42</td>
<td>4.21</td>
<td>28.25</td>
</tr>
<tr>
<td>SO$_x$</td>
<td>40.0</td>
<td>NR</td>
<td>7.5 x 10$^{-5}$</td>
<td>0</td>
<td>7.5 x 10$^{-5}$</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>40.0</td>
<td>0.08</td>
<td>0.71</td>
<td>0</td>
<td>0.71</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>NR</td>
<td>0.45</td>
<td>0.57</td>
<td>0.59</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>0.05</td>
<td>0.12</td>
<td>0</td>
<td>0.12</td>
</tr>
<tr>
<td>GHG (CO$_{2e}$)</td>
<td>N/A</td>
<td>NR</td>
<td>166,319</td>
<td>0</td>
<td>166,319</td>
</tr>
<tr>
<td>GHG (mass)</td>
<td>N/A</td>
<td>NR</td>
<td>42,949</td>
<td>0</td>
<td>42,949</td>
</tr>
<tr>
<td>Total HAPs</td>
<td>25.0</td>
<td>NR</td>
<td>0.53</td>
<td>0.71</td>
<td>0.71</td>
</tr>
<tr>
<td>Methylene Chloride</td>
<td>10.0/10.0</td>
<td>NR</td>
<td>0.02</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>1,1,1-Trichloroethane</td>
<td>10.0/10.0</td>
<td>NR</td>
<td>0.07</td>
<td>0.10</td>
<td>0.10</td>
</tr>
<tr>
<td>Benzene</td>
<td>10.0/2.0</td>
<td>NR</td>
<td>0.15</td>
<td>0.20</td>
<td>0.20</td>
</tr>
<tr>
<td>Tetrachloroethene</td>
<td>10.0/0.3</td>
<td>NR</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>Trichloroethene</td>
<td>10.0/10.0</td>
<td>NR</td>
<td>0.02</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>Toluene</td>
<td>10.0/10.0</td>
<td>NR</td>
<td>0.12</td>
<td>0.16</td>
<td>0.16</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>10.0/10.0</td>
<td>NR</td>
<td>0.02</td>
<td>0.007</td>
<td>0.007</td>
</tr>
<tr>
<td>Styrene</td>
<td>10.0/1.0</td>
<td>NR</td>
<td>0.005</td>
<td>0.10</td>
<td>0.10</td>
</tr>
<tr>
<td>Xylene (mixed isomers)</td>
<td>10.0/10.0</td>
<td>NR</td>
<td>0.07</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>PCBs (mixed compounds)</td>
<td>10.0/0.009</td>
<td>NR</td>
<td>0.03</td>
<td>&lt;0.009</td>
<td>&lt;0.009</td>
</tr>
<tr>
<td>Cadmium</td>
<td>10.0/0.01</td>
<td>NR</td>
<td>4.3 x 10$^{-4}$</td>
<td>5.7 x 10$^{-4}$</td>
<td>5.7 x 10$^{-4}$</td>
</tr>
<tr>
<td>Chromium</td>
<td>10.0/5.0</td>
<td>NR</td>
<td>4.7 x 10$^{-4}$</td>
<td>6.3 x 10$^{-4}$</td>
<td>6.3 x 10$^{-4}$</td>
</tr>
<tr>
<td>Lead</td>
<td>10.0/0.01</td>
<td>NR</td>
<td>2.9 x 10$^{-3}$</td>
<td>3.9 x 10$^{-3}$</td>
<td>3.9 x 10$^{-3}$</td>
</tr>
</tbody>
</table>

N/A = Not Applicable; N/D = Not Determined, NR=Not Reported
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 PCBs are conditioned below the SMAL levels.

APPLICABLE REQUIREMENTS

PSC Metals, LLC 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

- **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**
  - Per 10 CSR 10-6.110(4)(B)2.B(II) and (4)(B)2.C(II) a full EIQ is required for the first full calendar year the equipment approved by this permit is in operation.

- **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

- **MACT Regulations, 10 CSR 10-6.075**

- **Control of Sulfur Dioxide Emissions, 10 CSR 10-6.261**

- **Control of Emissions From Volatile Organic Liquid Storage, 10 CSR 10-5.500**
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 5, 2019, received April 9, 2019, designating PSC Metals, LLC as the owner and operator of the installation.
PSC Metals, LLC  
County of St. Louis City  
Project Number: 2019-04-019  
Installation ID Number: 510-1421  
Permit Number: 062019-006

This sheet covers the period from ____________ to ____________.

<table>
<thead>
<tr>
<th>EP#</th>
<th>Description</th>
<th>Monthly Throughput</th>
<th>PCBs Emission Factor (lb/ton)</th>
<th>Monthly Emissions (tons PCB/month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-052</td>
<td>Shredder</td>
<td></td>
<td>8.73 x 10^-5</td>
<td></td>
</tr>
</tbody>
</table>

SSM Emissions this month:

Total PCB Emissions this month (tons):

Consecutive 12 month rolling total PCB emissions (tons):

---

1. Multiply monthly throughput by PCB emission factor and divide by 2000 lb/ton. The shredder is the only source of PCB emissions.
2. PCBs emission factor from ISRI report, Table D-11F.
3. Start-up, Shut-down, and Malfunction (SSM) emissions as reported to the Air Pollution Control Program’s Compliance/Enforcement Section according to the provisions of 10 CSR 10-6.050. These emissions shall be included in the monthly totals.
4. Sum of monthly emissions and SSM emissions.
5. Sum of PCB emissions from the previous 11 months. **This value shall be less than 0.009 tons to demonstrate 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
- **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
Mr. Don Comer  
HSE Manager-Midwest Region  
PSC Metals, LLC  
3620 North Hall Street  
St. Louis, MO 63147  


Dear Mr. Comer:

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 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 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 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 Nicole Weidenbenner 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

SH:nwd

Enclosures

c: St. Louis Regional Office
PAMS File: 2019-04-019

Permit Number: 06 2 0 1 9 - 0 0 6