

**DRAFT**

**OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

**MEMORANDUM**

**June 9, 2025**

**TO:** Lee Warden, P.E., Permits and Engineering Group Manager

**THROUGH:** Richard Kienlen, P.E., New Source Permits Section Manager

**THROUGH:** Jennie Doan, E.I., Engineering Section, ROAT

**FROM:** Junru Wang, P.E., Existing Source Permits Section

**SUBJECT:** Evaluation of Permit Application No. **2005-148-O (M-6)**  
Terex USA, LLC  
CMI Terex Corporation (SIC 3531/NAICS 333120)  
Facility ID: 258  
Section 1, Township 11N, Range 5W, Canadian County, Oklahoma  
Latitude: 35.45798°N, Longitude: 97.68270°W  
Physical Address: 9528 West Interstate 40 Service Road, Oklahoma City, OK

**SECTION I. INTRODUCTION**

Terex USA, LLC (Terex or the applicant) has requested an operating permit modification for their existing minor source facility. The facility operates a machinery manufacturing operation in the west central part of Oklahoma City. The primary activities are involved in manufacturing of road construction equipment and their associated air pollution control systems. The facility is currently operating under Permit No. 2005-148-O (M-5), issued on January 21, 2021.

The purpose of this application is to remove the equipment that is no longer in operation at the facility. There are no changes to the methodology used to estimate the facility’s emissions for any of the equipment that will remain in operation. The following table lists the equipment that has been removed from the permit.

| <b>Emission Unit Group</b>                      | <b>Emission Point</b> | <b>EU Name/Model</b>                                  | <b>Construction Date</b> |
|---|-----------------------|---|--------------------------|
| EUG 2 – Paint/Coating Booths                    | 2-1                   | Two coating booths                                    | 1998                     |
|   | 2-3                   | Powder Coat Booth 1                                   | 2016                     |
|   | 2-4                   | Powder Coat Booth 2                                   | 2016                     |
| EUG 4 – Fabrication and Assembly Areas          | 4-1                   | Existing Cutting Operations (plasma arcs and torches) | 1969                     |
| EUG 5 – Surface Preparation Operation, Interior | 5-2                   | Wheel Blast Machine                                   | 2016                     |
|   | 5-3                   | Manual Blast Machine                                  | 2016                     |
| EUG 8 – Miscellaneous Activities                | 8-2                   | Parts washer  | 1994                     |
|   | 8-3                   | Test track  | 1969                     |

The applicant is authorized to demonstrate compliance using a facility-wide cap with emissions tracked monthly rather than emissions limitations following a “supercoating” approach. This method allows for increased throughput resulting in increased emissions (up to a maximum of 99.9 TPY for PM<sub>10</sub>, NO<sub>x</sub>, CO, and VOCs; up to 9.9 TPY for each individual HAP; and up to 24.9 TPY for total HAPs). The facility will remain a “synthetic minor” source. On issuance, this permit will be a FESOP.

**SECTION II. FACILITY DESCRIPTION**

The facility assembles large machinery and does some surface prep and painting. Currently, many of the products produced at the facility are brought in pre-manufactured and painted on-site. These units are assembled at the facility with minimal manufacturing process occurring at the facility. With this shift to assembly rather than manufacturing, many of the higher emitting activities are currently not performed at the facility on a regular basis. Pre-cut raw pieces are welded and soldered together. Following fabrication, the surface of the products are prepared for painting by shot blasting. After the surfaces are cleaned, products are moved to one of the paint booths where primer and topcoats are both applied. The surface coatings are dried using gas-fired burners totaling 20 MMBtu/hr. The facility includes two (2) 4,000-gallon capacity fuel dispensing tanks, one for diesel fuel and one for unleaded gasoline. Both are equipped with submerged fill pipes and are located underground.

**SECTION III. EQUIPMENT**

Emissions Unit Group No. 1 is designated as facility-wide operations.

| <b>EUG 2 – Paint/Coating Booths</b> |                      |                          |
|-------------------------------------|----------------------|--------------------------|
| <b>Emission Point</b>               | <b>EU Name/Model</b> | <b>Construction Date</b> |
| 2-1                                 | Three coating booths | 1998                     |

| <b>EUG 3 – Paint Booth Fuel Burning Equipment</b> |                       |                          |                               |
|---|-----------------------|--------------------------|-------------------------------|
| <b>Emission Point</b>                             | <b>EU Name/Model</b>  | <b>Construction Date</b> | <b>Heat Capacity MMBtu/hr</b> |
| 3-1   | Paint Dryer           | 1998                     | 20.0                          |
| 3-2   | Wash Bay Burner 1     | 2016                     | 0.35                          |
| 3-3   | Wash Bay Burner 2     | 2016                     | 0.35                          |
| 3-4   | Wash Bay Burner 3     | 2016                     | 0.35                          |
| 3-5   | Drying Oven Burner 1  | 2016                     | 2.50                          |
| 3-6   | Drying Oven Burner 2  | 2016                     | 2.50                          |
| 3-7   | Drying Oven Burner 3  | 2016                     | 2.50                          |
| 3-8   | Curing Oven Burner 1a | 2016                     | 2.50                          |
| 3-9   | Curing Oven Burner 1b | 2016                     | 2.50                          |
| 3-10  | Curing Oven Burner 2a | 2016                     | 2.50                          |
| 3-11  | Curing Oven Burner 2b | 2016                     | 2.50                          |
| 3-12  | Curing Oven Burner 3a | 2016                     | 2.50                          |
| 3-13  | Curing Oven Burner 3b | 2016                     | 2.50                          |
| 3-14  | Burn-off Oven Burner  | 2016                     | 4.00                          |

| <b>EUG 4 – Fabrication and Assembly Areas</b> |  |                          |
|---|--|--------------------------|
| <b>Emission Point</b>                         | <b>EU Name/Model</b>   | <b>Construction Date</b> |
| 4-2   | Assembly operations: including grinding, machining, welding, and soldering | 1969                     |
| 4-3   | Newer Plasma Cutter  | 2007                     |

| <b>EUG 5 – Surface Preparation Operation, Interior</b> |                              |                          |
|--|------------------------------|--------------------------|
| <b>Emission Point</b>                                  | <b>EU Name/Model</b>         | <b>Construction Date</b> |
| 5-1  | Steel Shot Abrasive Blasting | 1969                     |

| <b>EUG 7 – Unleaded Gasoline and Diesel Storage Tanks</b> |                          |                          |
|---|--------------------------|--------------------------|
| <b>Emission Point</b>                                     | <b>EU Name/Model</b>     | <b>Construction Date</b> |
| 7-1   | 4,000 Gallon Tank        | 1994                     |
| 7-2   | 4,000 Gallon Diesel Tank | <2001                    |

**SECTION IV. EMISSIONS**

Air emissions were calculated using the following methods and references:

EUG 2 – PAINT BOOTHS

Paint, primer, and solvent VOC and HAPs emissions were based on mass balances, while PM emissions from painting and priming assume 50% transfer efficiency from the Pro Xp85 kV air spray guns and 95% control efficiency of dry filters. It should be noted that the methods previously used to estimate emissions from coating operations were based on the use of supercoatings. The emissions limitations are set as facility-wide cap. Under this permit, emissions from coating operations will contribute to a facility-wide cap on NO<sub>x</sub>, CO, PM<sub>10</sub>, VOCs, individual HAPs, and total HAPs.

| <b>EUG 2 – Paint Booths</b> |                      |              |            |                        |            |
|-----------------------------|----------------------|--------------|------------|------------------------|------------|
| <b>Emission Point</b>       | <b>EU Name/Model</b> | <b>VOC</b>   |            | <b>PM<sub>10</sub></b> |            |
|                             |                      | <b>lb/hr</b> | <b>TPY</b> | <b>lb/hr</b>           | <b>TPY</b> |
| 2-1                         | Three Coating Booths | 294.54       | 57.97      | 7.20                   | 1.42       |

EUG 3 – FUEL-BURNING EQUIPMENT

Emissions from the fuel burning equipment are based on AP-42 (7/98), Section 1.4 and the ratings shown in the following table.

| <b>EUG 3 – Paint Booth Fuel Burning Equipment</b> |                      |                      |                       |            |              |            |              |            |
|---|----------------------|----------------------|-----------------------|------------|--------------|------------|--------------|------------|
| <b>Emission Point</b>                             | <b>EU Name/Model</b> | <b>Heat Capacity</b> | <b>NO<sub>x</sub></b> |            | <b>CO</b>    |            | <b>VOC</b>   |            |
|   |                      |                      | <b>lb/hr</b>          | <b>TPY</b> | <b>lb/hr</b> | <b>TPY</b> | <b>lb/hr</b> | <b>TPY</b> |
| 3-1   | Paint Dryer          | 20.0                 | 2.00                  | 8.76       | 1.68         | 7.36       | 0.11         | 0.47       |
| 3-2   | Wash Bay Burner 1    | 0.35                 | 0.034                 | 0.150      | 0.029        | 0.126      | 0.002        | 0.008      |
| 3-3   | Wash Bay Burner 2    | 0.35                 | 0.034                 | 0.150      | 0.029        | 0.126      | 0.002        | 0.008      |
| 3-4   | Wash Bay Burner 3    | 0.35                 | 0.034                 | 0.150      | 0.029        | 0.126      | 0.002        | 0.008      |
| 3-5   | Drying Oven Burner 1 | 2.50                 | 0.245                 | 1.074      | 0.206        | 0.902      | 0.013        | 0.059      |
| 3-6   | Drying Oven Burner 2 | 2.50                 | 0.245                 | 1.074      | 0.206        | 0.902      | 0.013        | 0.059      |

| <b>EUG 3 – Paint Booth Fuel Burning Equipment</b> |                       |                      |              |               |              |               |              |              |
|---|-----------------------|----------------------|--------------|---------------|--------------|---------------|--------------|--------------|
| <b>Emission Point</b>                             | <b>EU Name/Model</b>  | <b>Heat Capacity</b> | <b>NOx</b>   |               | <b>CO</b>    |               | <b>VOC</b>   |              |
|   |                       |                      | <b>lb/hr</b> | <b>TPY</b>    | <b>lb/hr</b> | <b>TPY</b>    | <b>lb/hr</b> | <b>TPY</b>   |
| 3-7   | Drying Oven Burner 3  | 2.50                 | 0.245        | 1.074         | 0.206        | 0.902         | 0.013        | 0.059        |
| 3-8   | Curing Oven Burner 1a | 2.50                 | 0.245        | 1.074         | 0.206        | 0.902         | 0.013        | 0.059        |
| 3-9   | Curing Oven Burner 1b | 2.50                 | 0.245        | 1.074         | 0.206        | 0.902         | 0.013        | 0.059        |
| 3-10  | Curing Oven Burner 2a | 2.50                 | 0.245        | 1.074         | 0.206        | 0.902         | 0.013        | 0.059        |
| 3-11  | Curing Oven Burner 2b | 2.50                 | 0.245        | 1.074         | 0.206        | 0.902         | 0.013        | 0.059        |
| 3-12  | Curing Oven Burner 3a | 2.50                 | 0.245        | 1.074         | 0.206        | 0.902         | 0.013        | 0.059        |
| 3-13  | Curing Oven Burner 3b | 2.50                 | 0.245        | 1.074         | 0.206        | 0.902         | 0.013        | 0.059        |
| 3-14  | Burn-off Oven Burner  | 4.00                 | 0.392        | 1.718         | 0.329        | 1.443         | 0.022        | 0.094        |
| <b>Totals</b>                                     |                       |                      | <b>4.701</b> | <b>20.590</b> | <b>3.949</b> | <b>17.297</b> | <b>0.259</b> | <b>1.121</b> |

EUG 4 – FABRICATION AND ASSEMBLY AREAS

Welding emission factors were taken from AP-42 (1/95), Table 12.19-1. Welding emissions were based on 100 lb/hr and 282,350 lb/year welding rod.

New plasma cutting emission factors were provided by the Swedish Institute of Production Engineering Research. The PM emissions shown in the following will be reduced by at least 90% by cartridge filters:

- PM: 26.0 g/min plasma cutting
- NOx: 2.6 g/min plasma cutting

| <b>EUG 4 – Fabrication and Assembly Areas</b> |  |                        |             |              |             |
|---|--|------------------------|-------------|--------------|-------------|
| <b>Emission Point</b>                         | <b>EU Name/Model</b>   | <b>PM<sub>10</sub></b> |             | <b>NOx</b>   |             |
|   |  | <b>lb/hr</b>           | <b>TPY</b>  | <b>lb/hr</b> | <b>TPY</b>  |
| 4-2   | Assembly operations: including grinding, machining, welding, and soldering | 0.23                   | 1.00        | --           | --          |
| 4-3   | Newer plasma torch cutting operations                                      | 0.69                   | 3.01        | 0.70         | 3.05        |
| <b>Totals</b>                                 |  | <b>0.92</b>            | <b>4.01</b> | <b>0.70</b>  | <b>3.05</b> |

EUG 5 – SURFACE PREPARATION OPERATION, INTERIOR

Shotblasting emission factors were taken from AP-42 (10/97), Table 13.2.6-1; emissions were based on using 200,000 lb/year shot.

| <b>EUG 5 – Surface Preparation Operation, Interior</b> |                              |                        |            |
|--|------------------------------|------------------------|------------|
| <b>Emission Point</b>                                  | <b>EU Name/Model</b>         | <b>PM<sub>10</sub></b> |            |
|  |                              | <b>lb/hr</b>           | <b>TPY</b> |
| 5-1  | Steel Shot Abrasive Blasting | 0.02                   | 0.10       |

EUG 7 – STORAGE TANKS

Storage tank emissions estimation used the EPA program, TANKS 4.0.9d, with a maximum annual throughput of 45,000 gallons.

| <b>EUG 7 – Storage Tanks</b> |                                     |              |             |
|------------------------------|-------------------------------------|--------------|-------------|
| <b>Emission Point</b>        | <b>EU Name/Model</b>                | <b>VOC</b>   |             |
|                              |                                     | <b>lb/hr</b> | <b>TPY</b>  |
| 7-1                          | 4,000 gallon Unleaded Gasoline Tank | 0.12         | 0.55        |
| 7-2                          | 4,000 gallon Diesel Tank            | 0.01         | 0.01        |
| <b>Totals</b>                |                                     | <b>0.13</b>  | <b>0.56</b> |

FACILITY-WIDE EMISSIONS

**SUMMARY OF CRITERIA POLLUTANT EMISSIONS BY OPERATION**

| <b>EUG ID#</b>                             | <b>Emission Unit Description</b>        | <b>PM<sub>10</sub></b> |               | <b>NO<sub>x</sub></b> |               | <b>VOC</b>     |               | <b>CO</b>    |              |
|--|---|------------------------|---------------|-----------------------|---------------|----------------|---------------|--------------|--------------|
|  |   | <b>lb/hr</b>           | <b>TPY</b>    | <b>lb/hr</b>          | <b>TPY</b>    | <b>lb/hr</b>   | <b>TPY</b>    | <b>lb/hr</b> | <b>TPY</b>   |
| EUG 2                                      | Paint Booths                            | 7.20                   | 1.42          | --                    | --            | 294.54         | 57.97         | --           | --           |
| EUG 3                                      | Paint Booth Fuel Burning Equipment      | --                     | --            | 4.70                  | 20.59         | 0.26           | 1.12          | 3.95         | 17.30        |
| EUG 4                                      | Fabrication & Assembly Areas            | 0.92                   | 4.01          | 0.70                  | 3.05          | --             | --            | --           | --           |
| EUG 5                                      | Surface Preparation Operation, Interior | 0.02                   | 0.10          | --                    | --            | --             | --            | --           | --           |
| EUG 7                                      | Storage Tanks                           | --                     | --            | --                    | --            | 0.13           | 0.56          | --           | --           |
| <b>Total Emissions</b>                     |   | <b>8.14</b>            | <b>5.53</b>   | <b>5.40</b>           | <b>23.64</b>  | <b>294.93</b>  | <b>59.65</b>  | <b>3.95</b>  | <b>17.30</b> |
| <b>Previous Emissions 2005-148-O (M-5)</b> |   | <b>15.94</b>           | <b>19.37</b>  | <b>11.42</b>          | <b>49.99</b>  | <b>491.70</b>  | <b>100.09</b> | <b>3.95</b>  | <b>17.30</b> |
| <b>Change in Emissions</b>                 |   | <b>-7.80</b>           | <b>-13.84</b> | <b>-6.02</b>          | <b>-26.35</b> | <b>-196.77</b> | <b>-40.44</b> | <b>--</b>    | <b>--</b>    |

Note: Facility-wide emissions of SO<sub>2</sub> from all equipment is minimal (<0.1 TPY)

HAP EMISSIONS

**HAZARDOUS AIR POLLUTANT EMISSIONS**

(Estimates using Supercoatings)

| <b>Component</b> | <b>CAS Number</b> | <b>Emissions</b> |            |
|------------------|-------------------|------------------|------------|
|                  |                   | <b>lb/hr</b>     | <b>TPY</b> |
| Chromium         | 7440473           | 0.01             | 0.01       |
| Cobalt           | 7440484           | 0.01             | 0.01       |
| Ethylbenzene     | 100414            | 8.00             | 0.08       |
| Methanol         | 67561             | 0.69             | 3.29       |
| Nickel           | 7440020           | 0.01             | 0.01       |
| Toluene          | 108883            | 42.31            | 9.88       |
| Xylene           | 1330207           | 48.00            | 3.30       |

In the existing permit, emissions of individual HAPs and total HAPs will vary, but there is a facility-wide cap on each individual HAP (9.9 TPY) and on total HAPs (24.9 TPY). The maximum projected HAP emissions are based on coating usage and maximum HAP and VOC content of current coatings. However, rather than be limited by the specifications of a “supercoating” the applicant will be required to maintain records demonstrating compliance with emission caps.

**SECTION V. OKLAHOMA AIR POLLUTION CONTROL RULES**

OAC 252:100-1 (General Provisions) [Applicable]  
Subchapter 1 includes definitions but there are no regulatory requirements.

OAC 252:100-2 (Incorporation by Reference) [Applicable]  
This subchapter incorporates by reference applicable provisions of Title 40 of the Code of Federal Regulations. These requirements are addressed in the “Federal Regulations” section.

OAC 252:100-3 (Air Quality Standards and Increments) [Applicable]  
Primary Standards are in Appendix E and Secondary Standards are in Appendix F of the Air Pollution Control Rules. At this time, all of Oklahoma is in attainment of these standards.

OAC 252:100-5 (Registration, Emissions Inventory, and Annual Fees) [Applicable]  
The owner or operator of any facility that is a source of air emissions shall submit a complete emission inventory annually on forms obtained from the Air Quality Division. Required annual information shall be provided to Air Quality.

OAC 252:100-7 (Permits for Minor Facilities) [Applicable]  
Subchapter 7 sets forth the permit application fees and the basic substantive requirements of permits for minor facilities. This project meets the conditions for a minor facility construction permit because there is no emission of any regulated pollutant of 100 TPY or more and HAP emissions do not exceed the 10/25 TPY threshold. As such, major source BACT consideration and public review are not required.

OAC 252:100-9 (Excess Emissions Reporting Requirements) [Applicable]  
Except as provided in OAC 252:100-9-7(a)(1), the owner or operator of a source of excess emissions shall notify the Director as soon as possible but no later than 4:30 p.m. the following working day of the first occurrence of excess emissions in each excess emission event. No later than thirty (30) calendar days after the start of any excess emission event, the owner or operator of an air contaminant source from which excess emissions have occurred shall submit a report for each excess emission event describing the extent of the event and the actions taken by the owner or operator of the facility in response to this event. Request for mitigation, as described in OAC 252:100-9-8, shall be included in the excess emission event report. Additional reporting may be required in the case of ongoing emission events and in the case of excess emissions reporting required by 40 CFR Parts 60, 61, and 63.

OAC 252:100-13 (Open Burning) [Applicable]  
Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in this subchapter.

OAC 252:100-19 (Particulate Matter) [Applicable]  
Section 19-4 regulates emissions of PM from new and existing fuel-burning equipment, with emission limits based on maximum design heat input rating. Fuel-burning equipment is defined in OAC 252:100-19 as any internal combustion engine or gas turbine, or other combustion device used to convert the combustion of fuel into usable energy. For equipment with a capacity of 20 MMBTUH, the applicable standard is 0.46 lb/MMBTU. OAC 252:100, Appendix C specifies a

PM emission limitation of 0.60 lbs/MMBTU for all equipment at this facility with a heat input rating of 10-MMBTUH or less. AP-42 (7/98), Section 1.4, shows PM emissions at 7.6 lb/million cubic feet, or 0.0076 lb/MMBTU. This permit requires the use of natural gas for all fuel-burning equipment to ensure compliance with Subchapter 19.

**Combustion Units Allowable PM Emission Rates**

| EP ID# | Equipment             | Maximum Heat Input (MMBTUH) | Appendix C Emission Limit (lbs/MMBTU) | Potential Emission Rate (lbs/MMBTU) |
|--------|-----------------------|-----------------------------|---------------------------------------|-------------------------------------|
| 3-2    | Wash Bay Burner 1     | 0.35                        | 0.60                                  | 0.0076                              |
| 3-3    | Wash Bay Burner 2     | 0.35                        | 0.60                                  | 0.0076                              |
| 3-4    | Wash Bay Burner 3     | 0.35                        | 0.60                                  | 0.0076                              |
| 3-5    | Drying Oven Burner 1  | 2.50                        | 0.60                                  | 0.0076                              |
| 3-6    | Drying Oven Burner 2  | 2.50                        | 0.60                                  | 0.0076                              |
| 3-7    | Drying Oven Burner 3  | 2.50                        | 0.60                                  | 0.0076                              |
| 3-8    | Curing Oven Burner 1a | 2.50                        | 0.60                                  | 0.0076                              |
| 3-9    | Curing Oven Burner 1b | 2.50                        | 0.60                                  | 0.0076                              |
| 3-10   | Curing Oven Burner 2a | 2.50                        | 0.60                                  | 0.0076                              |
| 3-11   | Curing Oven Burner 2b | 2.50                        | 0.60                                  | 0.0076                              |
| 3-12   | Curing Oven Burner 3a | 2.50                        | 0.60                                  | 0.0076                              |
| 3-13   | Curing Oven Burner 3b | 2.50                        | 0.60                                  | 0.0076                              |
| 3-14   | Burn-off Oven Burner  | 4.00                        | 0.60                                  | 0.0076                              |

Section 19-12 limits particulate emissions from new and existing fuel-burning equipment and/or any emission point in an industrial process based on process weight rate, as specified in Appendix G. As shown in the following table, all emission points are in compliance with Subchapter 19.

**Compliance with PM Emissions Limitations of OAC 252:100-19**

| Operation          | Process Rate (TPH) | Appendix G Emission Rate (lbs/hr) | Potential Emission Rate (lbs/hr) |
|--------------------|--------------------|-----------------------------------|----------------------------------|
| Welding            | 2.0                | 6.52                              | 0.23                             |
| Shot Blasting      | 1.5                | 5.38                              | 0.10                             |
| Paint Spraying     | 20.0               | 30.51                             | 12.00                            |
| New Plasma Cutters | 2.0                | 6.52                              | 0.35                             |

OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]  
 No discharge of greater than 20% opacity is allowed except for short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity. The permit requires maintenance of air pollution controls on the paint booth and blasting operations to ensure compliance with this rule.

OAC 252:100-29 (Fugitive Dust) [Applicable]  
 Subchapter 29 prohibits the handling, transportation, or disposition of any substance likely to become airborne or windborne without taking “reasonable precautions” to minimize emissions of fugitive dust. No person shall cause or permit the discharge of any visible fugitive dust emissions beyond the property line on which the emissions originate in such a manner as to damage or to

interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or to interfere with the maintenance of air quality standards.

OAC 252:100-31 (Sulfur Compounds) [Applicable]

Part 2 limits the ambient air concentration of H<sub>2</sub>S emissions from any facility to 0.2 ppmv (24-hour average) at standard conditions which is equivalent to 283 µg/m<sup>3</sup>. Fuel-burning equipment fired with commercial natural gas will not have the potential to exceed the H<sub>2</sub>S ambient air concentration limit.

Part 5 limits sulfur dioxide emissions from new petroleum or natural gas process equipment (constructed after July 1, 1972). For gaseous fuels the limit is 0.2 lb/MMBTU heat input averaged over 3 hours. For natural gas having a gross calorific value of 1,020 BTU/SCF, this limit corresponds to fuel sulfur content of 1,208 ppmv. The only combustion sources at this facility are all fired on commercially available pipeline natural gas. “Pipeline natural gas” is defined in Part 72 as having 0.5 grains TRS/100-SCF, which corresponds to a fuel sulfur content below the fuel sulfur content derived from the standard.

OAC 252:100-33 (Nitrogen Oxides) [Not Applicable]

This subchapter limits new gas-fired fuel-burning equipment with rated heat input greater than or equal to 50 MMBTUH to emissions of 0.2 lb of NO<sub>x</sub> per MMBTU. There are no equipment items that exceed the 50 MMBTUH threshold.

OAC 252:100-35 (Carbon Monoxide) [Not Applicable]

This facility has none of the affected sources: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic cracking unit, or petroleum catalytic reforming unit.

OAC 252:100-37 (Volatile Organic Compounds) [Applicable]

Part 3 requires storage tanks constructed after December 28, 1974, with a capacity of 400 gallons or more and storing a VOC with a vapor pressure greater than 1.5-psia at maximum storage temperature to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. This requirement affects the 4,000 gallon gasoline tank.

Part 3 requires VOC loading facilities with a throughput equal to or less than 40,000 gallons per day to be equipped with a system for submerged filling of tank trucks or trailers if the capacity of the vehicle is greater than 200 gallons. This facility does not have the physical equipment (loading arm and pump) to conduct this type of loading and is not subject to this requirement.

Part 5 limits the VOC content of coatings used in coating lines and operations. The limits are given in the following table.

| Coating Type           | Limit <sup>1</sup><br>(lb VOC/gal. coating) |
|------------------------|---|
| Alkyd primer           | 4.8   |
| Vinyls                 | 6.0   |
| NC lacquers            | 6.4   |
| Acrylics               | 6.0   |
| Epoxies                | 4.8   |
| Maintenance finishes   | 4.8   |
| Custom products finish | 6.5   |

<sup>1</sup> *These limits apply to the coatings as applied. The limits are expressed in pounds of VOC per gallon of coating, excluding the volume of any water and exempt organic compounds.*

As an alternative to these VOC content limits for coatings used at the facility, the owner or operator may elect to develop a plant-wide emission plan in accordance with OAC 252:100-37-25(b) or the facility may reduce emissions of VOCs from coatings with higher VOC concentrations to the levels indicated by incineration, absorption/adsorption, or any other process of equivalent reliability and protectiveness provided that no air pollution, as defined by the Clean Air Act, results. This part also requires that VOCs emitted during the cleanup of any article, machine, or equipment used in applying coatings that are subject to the limits discussed previously be counted in determining compliance with those limits. The permit requires all coatings to comply with these VOC content limits, including the VOC content of solvents used to clean up any article, machine, or equipment used in applying coatings.

On September 26, 2023, a full compliance inspection was conducted by the Compliance section of AQD. Records received during the inspection did not indicate any exceedance of the VOC emission limits identified in the table above. Records also demonstrate that all paint-related operations at the facility are incorporated into the overall 12-month rolling total emission calculations.

Part 7 also requires fuel-burning equipment to be operated and maintained so as to minimize emissions. Temperature and available air must be sufficient to provide essentially complete combustion. The equipment is designed to satisfy these requirements.

Part 7 requires all effluent water separator openings which receive water containing more than 200 gallons per day of any VOC, to be sealed or the separator to be equipped with an external floating roof or a fixed roof with an internal floating roof or a vapor recovery system. No effluent water separators are located at this facility.

OAC 252:100-42 (Toxic Air Contaminants (TAC)) [Applicable]  
This subchapter regulates TAC that are emitted into the ambient air in areas of concern (AOC). Any work practice, material substitution, or control equipment required by the Department prior to June 11, 2004, to control a TAC, shall be retained, unless a modification is approved by the Director. Since no AOC has been designated there are no specific requirements for this facility at this time.

OAC 252:100-43 (Testing, Monitoring, and Recordkeeping) [Applicable]  
This subchapter provides general requirements for testing, monitoring and recordkeeping and applies to any testing, monitoring or recordkeeping activity conducted at any stationary source. To determine compliance with emissions limitations or standards, the Air Quality Director may require the owner or operator of any source in the state of Oklahoma to install, maintain and operate monitoring equipment or to conduct tests, including stack tests, of the air contaminant source. All required testing must be conducted by methods approved by the Air Quality Director and under the direction of qualified personnel. A notice-of-intent to test and a testing protocol shall be submitted to Air Quality at least 30 days prior to any EPA Reference Method stack tests. Emissions and other data required to demonstrate compliance with any federal or state emission limit or standard, or any requirement set forth in a valid permit shall be recorded, maintained, and

submitted as required by this subchapter, an applicable rule, or permit requirement. Data from any required testing or monitoring not conducted in accordance with the provisions of this subchapter shall be considered invalid. Nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

## SECTION VI. FEDERAL REGULATIONS

NSPS, 40 CFR Part 60 [Not Applicable]

Subpart Kb (Volatile Organic Liquids Storage Vessels) affects volatile organic materials storage tanks with a capacity above 19,813 gallons which commenced construction, reconstruction, or modification after July 23, 1984. The two fuel tanks are both 4,000 gallons, smaller than the 19,813-gallon threshold for applicability.

Subpart SS, Industrial Surface Coatings: Large Appliances. A “large appliance product” means any organic surface-coated metal range, oven, microwave oven, refrigerator, freezer, washer, dryer, dishwasher, water heater, or trash compactor manufactured for household, commercial, or recreational use. The facility does not manufacture any of these products. It should be noted that the facility does manufacture landfill waste compactors, but the units manufactured are heavy pieces of mobile equipment (crawler-tractors), not the large appliances covered by this subpart.

Subpart WWW (Municipal Solid Waste Landfills) does not affect manufacture of any upstream waste handling or collection equipment.

NESHAP, 40 CFR Part 61 [Not Applicable]

There are no emissions of any of the regulated pollutants: arsenic, asbestos, benzene, beryllium, coke oven emissions, mercury, radionuclides, or vinyl chloride.

NESHAP, 40 CFR Part 63 [Subparts CCCCCC and XXXXXX Applicable]

Subpart T, “Halogenated Solvent Cleaning.” This subpart was promulgated December 2, 1994, and affects parts cleaning equipment that uses certain halogenated solvents in formulations where the halogenated solvent is present in concentrations greater than 5% by weight. The facility does not use any of the materials subject to this subpart.

Subpart MMMM, “Surface Coating of Miscellaneous Metal Parts and Products.” This subpart was promulgated on January 2, 2004. Subpart MMMM affects major sources of HAPs. The facility became an area source of HAPs prior to the compliance date (January 2, 2007).

Subpart CCCCCC, “Gasoline Dispensing Facilities.” This subpart establishes emission limitations and management practices for HAP emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF) located at an area source. GDF means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.

Total annual gasoline throughput has historically been less than 10,000 gallons of gasoline. As such, Terex is subject to the requirements for GDFs with a monthly throughput of less than 10,000 gallons of gasoline and must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

- 1) Minimize gasoline spills;
- 2) Clean up spills as expeditiously as practicable;
- 3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
- 4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

Subpart HHHHHH, “Paint Stripping and Miscellaneous Surface Coating Operations” affects area sources involved in:

- Paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl), in paint removal processes;
- Autobody refinishing operations that encompass motor vehicle and mobile equipment spray-applied surface coating operations; or
- Spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment

Operations performed at the facility are subject to NESHAP Subpart XXXXXX. Therefore, it is exempt from the requirements of NESHAP Subpart HHHHHH.

Subpart XXXXXX, Nine Metal Fabrication and Finishing Source Categories. This subpart affects area sources that are primarily engaged in the operations in one of the nine source categories listed below:

- (1) Electrical and Electronic Equipment Finishing Operations;
- (2) Fabricated Metal Products;
- (3) Fabricated Plate Work (Boiler Shops);
- (4) Fabricated Structural Metal Manufacturing;
- (5) Heating Equipment, except Electric;
- (6) Industrial Machinery and Equipment Finishing Operations;
- (7) Iron and Steel Forging;
- (8) Primary Metal Products Manufacturing; and
- (9) Valves and Pipe Fittings.

The provisions of this subpart apply to each new and existing affected source listed and defined below which use materials that contain MFHAP or that have the potential to emit MFHAP:

- (1) A dry abrasive blasting affected source is the collection of all equipment and activities necessary to perform dry abrasive blasting operations;
- (2) A machining affected source is the collection of all equipment and activities necessary to perform machining operations;
- (3) A dry grinding and dry polishing with machines affected source is the collection of all equipment and activities necessary to perform dry grinding and dry polishing with machines operations;
- (4) A spray painting affected source is the collection of all equipment and activities necessary to perform spray applied painting operations. A spray painting affected

- source includes all equipment used to apply cleaning materials to a substrate to prepare it for paint application (surface preparation) or to remove dried paint; to apply a paint to a substrate (paint application) and to dry or cure the paint after application; or to clean paint operation equipment (equipment cleaning).
- (5) A welding affected source is the collection of all equipment and activities necessary to perform welding operations.

Metal fabrication and finishing metal HAPs (MFHAPs) are defined to be the compounds of cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form with the exception of lead. ‘Material containing MFHAP’ is defined as material containing one or more of those metals in amounts greater than 0.1% for carcinogens and greater than 1% for non-carcinogens as shown in the following table.

| <b>Metal</b>   | <b>Percent to be MFHAP</b> |
|----------------|----------------------------|
| Cadmium (Cd)   | 0.1                        |
| Chromium (Cr)  | 0.1                        |
| Lead (Pb)      | 0.1                        |
| Manganese (Mn) | 1.0                        |
| Nickel (Ni)    | 0.1                        |

Spray painting affected source(s) specifically subject to the requirements of this subpart are not subject to the miscellaneous surface coating provisions of subpart HHHHHH. This subpart does not apply to research or laboratory facilities or to tool or equipment repair operations, facility maintenance, or quality control activities.

According to § 63.11514(a), a facility is subject to this subpart if it is an area source that is primarily engaged in the operations in one of the nine source categories listed in paragraphs (a)(1) through (9) of this section and listed previously. Terex appears to be subject based on its SIC code (3531); Table 1, “Regulated Categories and Entities Potentially Affected,” calls out this SIC code under the category “Industrial Machinery and Equipment Finishing Operations.” In the column, “Examples of regulated entities,” construction machinery manufacturing is mentioned. Terex meets the definition of an existing affected source, because it began operations before April 3, 2008, per §63.11514(c). As an existing source, it was required to achieve compliance with the any and all applicable provisions of this subpart by July 25, 2011. On that date, the facility was required to comply with all applicable standards and management practices detailed in §63.11516, monitoring requirements identified in §63.11517, as well as notification, recordkeeping, and reporting requirements specified in §63.11519.

Due to the complexity of this subpart, it is essential that the owner/operator of the facility become familiar with these regulations and, in particular, the management practices that will be required. An outline of types of management practices is included below. This outline is intended to provide an overview of the sorts of requirements included in this subpart is not intended to take the place of the complete text of the regulations included in the CFR. These management practices (to minimize emissions of MFHAP) cover dry abrasive blasting, machining, dry grinding/polishing, spray painting, and welding operations that use materials that contain MFHAP or have the potential to emit MFHAP. The management practices include but are not limited to the following:

Dry Abrasive Blasting Operations:

- Capture emissions and vent them to a filtration control device;
- Minimize dust generation during emptying of enclosures;
- Minimize excess dust in the surrounding area;
- Enclose storage areas and holding bins, seal chutes and conveyors;
- Not re-use media unless contaminants have been filtered;
- Operate all equipment according to manufacturer's instructions; and
- To switch from high PM emitting blast media to low PM emitting blast media.

Machining Operations:

- Minimize excess dust in the surrounding area; and
- Operate all equipment according to manufacturer's instructions.

Dry Grinding and Dry Polishing with Machines Operations:

- Capture emissions and vent them to a filtration control device;
- Minimize excess dust in the surrounding area; and
- Operate all equipment including the filtration control device, according to manufacturer's instructions.

Spray Painting Operations:

- Spray booths or spray rooms must have a full roof, at least two complete walls, and one or two complete side curtains or other barrier material so that all four sides are covered;
- The spray booths or spray rooms must be ventilated so that air is drawn into the booth and leaves only through the filter;
- All spray booths or spray rooms must be fitted with a type of filter technology that is demonstrated to achieve at least 98 % capture of MFHAP;
- Perform regular inspection and replacement of the filters in all spray booths or spray rooms according to manufacturer's instructions;
- All paints applied via spray-applied painting must be applied with a high-volume, low-pressure (HVLV) spray gun, electrostatic application, airless spray gun, air-assisted airless spray gun, or an equivalent technology;
- All cleaning of paint spray guns must be done with either non-HAP cleaning solvents, or in such a manner that an atomized mist of spray of gun cleaning solvent and paint residue is not created outside of a container that collects the used gun cleaning solvent;
- All workers performing painting must be certified that they have completed training in the proper spray application of paints and the proper setup and maintenance of spray equipment;
- Training and certification will be valid for a period not to exceed 5 years after the date the training is completed; and
- All personnel must receive refresher training and be re-certified every 5 years.

Welding Operations:

- Operate all equipment, capture, and control devices according to manufacturer's instructions.
- Use welding processes with reduced fume generation capabilities (e.g., GMAW/MIG);
- Use welding process variations (e.g., pulsed current GMAW), to reduce fume generation;
- Use welding filler metals, shielding gases, carrier gases, or other process materials which are capable of reduced welding fume generation;

- Optimize welding process variables (e.g., electrode diameter, voltage, amperage, welding angle, shield gas flow rate, travel speed) to reduce the amount of welding fume generated; and
- Use a welding fume capture and control system, operated according to the manufacturer's specifications.
- Perform visual determinations of welding fugitive emissions, and
- Implement a Site-Specific Welding Emissions Management Plan as necessary.

This facility has dry abrasive blasting operations, machining operations, dry grinding/polishing operations, spray painting operations, and welding operations that (if they involve the use of materials that contain MFHAP or have the potential to emit MFHAP) will be subject to this subpart. The permit will require the facility to comply with all applicable requirements of this subpart.

## SECTION VII. COMPLIANCE

### TIER CLASSIFICATION

This application has been determined to be **Tier I** based on the request for a modification of a minor operating permit that did not undergo the FESOP Enhanced NSR Process. The draft permit will undergo public notice on the DEQ's web site as required in OAC 252:4-7-13(g). The public, tribal governments, and the EPA will have 30 days to comment on the draft permit. Permits available for public review and comments are found at this location:

<https://www.deq.ok.gov/permits-for-public-review/>

The applicant has submitted an affidavit that they are not seeking a permit for land use or for any operation upon land owned by others without their knowledge. The affidavit certifies that the applicant owns the land used to accomplish the permitted purpose.

### COMPLIANCE AND ENFORCEMENT CASE

There are no active Air Quality compliance or enforcement issues concerning this facility.

### TESTING

No equipment is currently subject to testing requirements.

### INSPECTION

A full compliance evaluation (FCE) was conducted on September 26, 2023. Chad Haecherl, Environmental Programs Specialist for the Department of Environmental Quality, Air Quality Division ("DEQ"), conducted the evaluation. John Howard, HSE Specialist, represented Terex for the on-site evaluation. Jakob Echelle, HSE Manager for Terex, provided records via email. Based on the information provided or gathered during this evaluation, the following violations were identified:

1. Differential pressure readings on the paint booth filters have not been conducted since the last FCE. This is a violation of Specific Condition 2.A.vii.
2. Differential pressure readings have not been conducted on the steel shot exhaust filters since the last FCE. This is a violation of Specific Condition 2.F.iii.
3. Differential pressure readings have not been conducted on the plasma cutter filters since the last FCE. This is a violation of Specific Condition 2.G.v.
4. NESHAP Subpart XXXXXX, §63.11519(b)(2)(ii) requires all subsequent annual certifications to be prepared and submitted each year by January 31<sup>st</sup> for the previous calendar year from January 1<sup>st</sup> through December 31<sup>st</sup>. Since the last FCE, the Facility has submitted annual certifications for calendar years 2020 and 2021. The annual certification for 2022 was never submitted. This is a violation of NESHAP Subpart XXXXXX, §63.11519(b)(2)(ii).

Enforcement ID 12609 was opened to address these violations, and the case was closed on February 11, 2025.

#### FEE PAID

A fee of \$750 for an individual minor source operating permit was paid on April 11, 2025.

#### **SECTION VIII. SUMMARY**

The facility was constructed and is operating as described in the permit application. Ambient air quality standards are not threatened at this site. There are no active Air Quality compliance or enforcement issues that would prevent issuance of the permit. Issuance of the FESOP is recommended, contingent on public review.

DRAFT



# PERMIT

AIR QUALITY DIVISION  
STATE OF OKLAHOMA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
707 N. ROBINSON STREET, SUITE 4100  
P.O. BOX 1677  
OKLAHOMA CITY, OKLAHOMA 73101-1677

FESOP Number: 2005-148-O (M-6)

**Terex, USA, LLC**

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having complied with the requirements of the law, is hereby granted permission to operate CMI Terex Corporation located in Section 1, Township 11N, Range 5W, Canadian County, Oklahoma, subject to Standard Conditions dated February 13, 2020, and Specific Conditions, both attached.

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DRAFT

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Lee Warden, P.E.  
Permits and Engineering Group Manager

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Issuance Date

**PERMIT TO OPERATE  
AIR POLLUTION CONTROL FACILITY  
SPECIFIC CONDITIONS**

**Terex USA, LLC  
CMI Terex Corporation**

**FESOP No. 2005-148-O (M-6)**

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality and received on April 4, 2025. The Evaluation Memorandum dated June 9, 2025, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain limitations or permit requirements. Continuing operations under this permit constitutes acceptance of, and consent to the conditions contained herein:

1. **Facility-Wide PM<sub>10</sub>, NO<sub>x</sub>, CO, VOC, and HAP Emission Limits:** PM<sub>10</sub>, NO<sub>x</sub>, CO, VOC, and HAP emissions from the whole facility are based on an estimated material usage, emission factors, and hours of operation and shall be limited to the emission limits shown below. The total PM<sub>10</sub>, NO<sub>x</sub>, CO, VOC, and HAP emissions from the whole facility shall not exceed the following limits based on a monthly 12-month rolling total. Each month the permittee shall calculate the total emissions from the whole facility for that month and add it to the previous eleven months for the following: PM<sub>10</sub>, NO<sub>x</sub>, CO, VOC, and HAPs reported on any Material Safety Data Sheet (MSDS) for any material used or consumed (e.g., coatings, primers, welding rods) at the facility.

| <b>Pollutant</b>    | <b>Facility-Wide Emission Limit <sup>1</sup></b> |
|---------------------|--|
| PM <sub>10</sub>    | 99.9 TPY   |
| NO <sub>x</sub>     | 99.9 TPY   |
| CO                  | 99.9 TPY   |
| VOCs                | 99.9 TPY   |
|                     |  |
| HAPs                |  |
| Individual HAP      | 9.9 TPY  |
| Combination of HAPs | 24.9 TPY   |

<sup>1</sup> TPY limits are based upon a 12-month rolling total.

2. Points of Emissions and Limitations:
  - A. **Paint Booths and Coating Operations:** Emissions from the three paint booths and related operations (e.g., cleaning of paint guns) shall be limited by (and will contribute to) the facility-wide cap on PM<sub>10</sub>, VOC, and HAP emissions identified in Specific Condition 1.
    - i. Each calendar month, the applicant shall record the quantity of each coating, primer, solvent, or related material used and shall compute the emissions of PM<sub>10</sub>, VOCs, individual HAP, and total HAPs using the following equations (or their equivalent):

PM<sub>10</sub>:             $E = V_c \cdot D_c \cdot F_{sol} \cdot (1/2000) \cdot 0.5 \cdot (1-0.95)$

VOC:                 $E = V_c \cdot D_c \cdot F_{voc} \cdot (1/2000)$

VOC HAP:  $E = V_c \cdot D_c \cdot F_{vhap} \cdot (1/2000)$

Particulate HAP:  $E = V_c \cdot D_c \cdot F_{phap} \cdot (1/2000) \cdot 0.5 \cdot (1-0.95)$

Where E = Emissions (tons)

$V_c$  = Volume of material consumed, gallons.

$D_c$  = Density of material consumed, pounds per gallon.

$F_{sol}$  = Mass fraction solids, unitless.

$F_{voc}$  = Mass fraction VOC, unitless.

$F_{vhap}$  = Mass fraction VOC HAP, unitless.

$F_{phap}$  = Mass fraction particulate HAP, unitless.

- ii. Each calendar month the applicant shall incorporate emissions from paint booths and coating operations into the 12-month rolling total emissions for PM<sub>10</sub>, VOCs, individual HAP, and total HAPs.
- iii. The VOC content of coatings less water and exempt solvents shall not exceed the following limits and shall include all solvents used to clean up any article, machine, or equipment used in applying coatings:

| Coating                | Maximum VOC Content, lb/gal |
|------------------------|-----------------------------|
| Alkyd primer           | 4.8                         |
| Vinyls                 | 6.0                         |
| NC Lacquers            | 6.4                         |
| Acrylics               | 6.0                         |
| Epoxies                | 4.8                         |
| Maintenance Finishes   | 4.8                         |
| Custom Products Finish | 6.5                         |

- iv. VOC emissions from clean-up solvents may be determined as the difference between the amounts used minus the amounts recovered for disposal.
- v. Paint spraying equipment shall be cleaned with VOCs being drained into a closed container.
- vi. Particulate emissions from paint booth overspray shall be controlled by dry filters, with efficiency of at least 95%. The filters or alternative device with the same or better control efficiency shall be maintained and operated in accordance with manufacturer's specifications.
- vii. The permittee shall monitor and record the differential pressure reading for each measurement device at least once per month while the paint booths are operating. The pressure differential shall be maintained per manufacturer specifications.
- viii. The permittee shall visually inspect each set of dry filters at least once every month for alignment, saturation, tears, holes and any other condition that may affect the filter's performance.
- ix. The permittee shall retain a copy of the MSDS of each type of coating, primer, solvent, or related material used.

- B. **Paint Drying Heaters:** Emissions from the paint booth heaters shall be limited by (and will contribute to) the facility-wide cap on PM<sub>10</sub>, NO<sub>x</sub>, CO, VOC, and HAP emissions identified in Specific Condition 1.
- i. Each calendar month, the applicant shall calculate emissions of PM<sub>10</sub> and VOCs from the paint booth heaters using emission factors from AP-42 (7/98), Section 1.4, the heat input ratings of the heaters, the hours of operation and/or fuel consumption. These emissions shall be summed with other emissions for determining compliance with the facility-wide cap.
- C. **Gasoline and Diesel Storage Tanks:** Emissions from the gasoline and diesel storage tanks shall be limited by (and will contribute to) the facility-wide cap on VOC and HAP emissions identified in Specific Condition 1.
- i. Each calendar month the applicant shall record the quantity of gasoline and diesel fuel delivered and shall compute the emissions of VOCs using the following equations (or AP-42 (06/20), Section 7.1 or later):  
  
Gasoline:  $E = 0.0307 + (V_{\text{gas}}/237,000)$   
  
Diesel Fuel:  $E = 0.00084$   
  
Where E = Emissions (tons)  
 $V_{\text{gas}}$  = Volume of gasoline delivered, gallons.
  - ii. Each calendar month the applicant shall include emissions from the gasoline and diesel tanks in the calculations used to demonstrate compliance with the facility-wide VOC and HAP caps identified in Specific Condition 1.
  - iii. The gasoline throughput of the facility storage tank shall not exceed 45,000 gallons per year, 12-month rolling total.
  - iv. The gasoline tank shall be equipped for submerged fill.
- D. **Welding:** Emissions from welding operations shall be limited by (and will contribute to) the facility-wide cap on PM<sub>10</sub> and HAP (if applicable) emissions identified in Specific Condition 1.
- i. Each calendar month, the applicant shall calculate emissions of PM<sub>10</sub> and HAPs (if required) from welding operations using emission factors from AP-42 (1/95), Table 12.91-1, the quantity of welding rod used (pounds), and the HAP content (if required). These emissions shall be summed with other emissions for determining compliance with the facility-wide cap.
  - ii. The permittee shall retain a copy of the MSDS for each type of welding rod used. If any MSDS shows any HAP to be present in any type of welding rod in concentrations greater than or equal to 0.1% by weight, those HAP emissions shall be computed and used to demonstrate compliance with the facility-wide cap on individual and total HAP emissions.

- E. **Abrasive Blasting:** Emissions from abrasive blasting operations shall be limited by (and will contribute to) the facility-wide cap on PM<sub>10</sub> emissions identified in Specific Condition 1.
- i. Each calendar month the applicant shall calculate emissions of PM<sub>10</sub> from abrasive blasting operations using emission factors from AP-42 (9/97), Table 13.2.6-1 and the quantity of steel shot used (pounds). These emissions shall be summed with other emissions for determining compliance with the facility-wide cap.
  - ii. Exhausts from the steel shot blasting operation shall be processed by fabric filter or equivalent particulate matter emissions controls, with efficiency of at least 95%. The filters or alternative device with the same or better control efficiency shall be maintained and operated in accordance with manufacturer's specifications.
  - iii. The permittee shall monitor and record the differential pressure reading for each measurement device at least once per month while the steel shot blasting operations are conducted. The pressure differential shall be maintained per manufacturer specifications.
  - iv. The permittee shall visually inspect each set of fabric filters or alternative control device at least once every month for alignment, saturation, tears, holes and any other condition that may affect the control's performance.
  - v. Steel Shot Abrasive Blasting (EUG 5-1) media usage shall not exceed 200,000 pounds per year (12-month rolling total).
  - vi. The permittee shall record quantities of steel shot used (monthly and 12-month rolling totals).
- F. **Fabrication and Assembly:** Emissions from the plasma cutters (installed in 2007), grinding, machining, soldering, and related activities shall be limited by (and will contribute to) the facility-wide cap on PM<sub>10</sub> and NO<sub>x</sub> emissions identified in Specific Condition 1. Emission calculations for NO<sub>x</sub> shall be based on equations provided by the Swedish Institute of Production Engineering Research and the operating time for the plasma cutting.
- i. Each calendar month, the applicant shall record the cutting time for the plasma cutters and shall compute the emissions of PM<sub>10</sub> and NO<sub>x</sub> using the following equations (or their equivalent):

Plasma Cutters

$$\text{PM}_{10}: \quad E = 26.0 \text{ g/min} \cdot T_{\text{plas-cut}} \cdot (1/907,185) \cdot (1-0.90)$$

$$\text{NO}_x: \quad E = 2.6 \text{ g/min} \cdot T_{\text{plas-cut}} \cdot (1/907,185) \cdot (1-0.90)$$

Where E = Emissions (tons)

$T_{\text{plas-cut}}$  = Duration of plasma cutting operations, minutes.

- ii. Each calendar month the applicant shall compute emissions associated with grinding, machining, and soldering operations, using factors from AP-42 (1/95), Section 12.19 (electric arc welding) and AP-42 (4/2009), Table 12.5-1 (machine scarfing).
- iii. Each calendar month the applicant shall incorporate emissions from fabrication and assembly operations into the 12-month rolling total emissions for PM<sub>10</sub> and NO<sub>x</sub>.

- iv. Discharge from the two plasma torch cutters (installed in 2007) shall be processed by cartridge filters or an equivalent device with a PM control efficiency of at least 90%. The controls shall be operated and maintained per manufacturer specifications.
  - v. The permittee shall monitor and record the differential pressure reading for each measurement device at least once per month while the plasma torch cutters are operating. The pressure differential shall be maintained per manufacturer specifications.
  - vi. The permittee shall visually inspect each set of cartridge filters or alternative control device at least once every month for alignment, saturation, tears, holes and any other condition that may affect the control's performance.
3. Upon issuance of an operating permit, the permittee shall be authorized to operate the facility continuously (24 hours per day, every day of the year).
  4. The fuel-burning equipment shall be fueled only with pipeline-quality natural gas. Pipeline-quality natural gas is subject (under Part 72) to a limit of 0.5 grains of total reduced sulfur (TRS) per 100 scf. Compliance can be shown by a current gas company bill. Compliance shall be demonstrated at least once every calendar year.
  5. The owner/operator shall comply with applicable requirements of the NESHAP, 40 CFR Part 63, Subpart CCCCCC in accordance with the timeline provided in the federal regulations. The requirements are including, but not limited to, the following:
    - a. § 63.11110 What is the purpose of this subpart?
    - b. § 63.11111 Am I subject to the requirements of this subpart?
    - c. § 63.11112 What parts of my affected source does this subpart cover?
    - d. § 63.11113 When do I have to comply with this subpart?
    - e. § 63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.
    - f. § 63.11117 Requirements for facilities with monthly throughput of 10,000 gallons of gasoline or more.
    - g. § 63.11118 Requirements for facilities with monthly throughput of 100,000 gallons of gasoline or more.
    - h. § 63.11120 What testing and monitoring requirements must I meet?
    - i. § 63.11124 What notifications must I submit and when?
    - j. § 63.11125 What are my recordkeeping requirements?
    - k. § 63.11126 What are my reporting requirements?
    - l. § 63.11130 What parts of the General Provisions apply to me?
    - m. § 63.11131 Who implements and enforces this subpart?
    - n. § 63.11132 What definitions apply to this subpart?
  6. The owner/operator shall comply with all applicable requirements of the NESHAP: Nine Metal Fabrication and Finishing Source Categories, Subpart XXXXXX, for each affected facility including but not limited to:  
**Applicability and Compliance Dates**
    - a. § 63.11514 Am I subject to this subpart?
    - b. § 63.11515 What are my compliance dates?

**Standards and Compliance Requirements**

- c. § 63.11516 What are my standards and management practices?
- d. § 63.11517 What are my monitoring requirements?
- e. § 63.11519 What are my notification, recordkeeping, and reporting requirements?

**Other Requirements and Information**

- f. § 63.11522 What definitions apply to this subpart?
  - g. § 63.11523 What General Provisions apply to this subpart?
7. All records necessary to demonstrate compliance with permit conditions shall be maintained on-site or at a nearby field office for a period of at least five years following dates of recording, and shall be available for review by regulatory personnel during normal business hours. Such records include, but are not necessarily limited to, the following:
- a. Usage of materials listed in Specific Condition Number 2 by type and volume/quantity and PM and VOC emissions calculations (monthly and 12-month rolling totals).
  - b. A material safety data sheet (MSDS) which documents the VOC content and chemical composition of each coating product.
  - c. Gasoline throughput at the 4,000-gallon tank (monthly and 12-month rolling totals).
  - d. Usage of welding electrode and solder (monthly and 12-month rolling totals).
  - e. Steel shot usage in abrasive blasting operations (monthly and 12-month rolling totals).
  - f. Cutting times for the plasma cutters and associated PM<sub>10</sub> and NO<sub>x</sub> emissions (monthly and 12-month rolling totals).
  - g. For the fuel(s) burned, the appropriate document(s) as described in Specific Condition No. 4.
  - h. Inspection and maintenance of paint booth filters, abrasive blasting exhaust filters, and plasma cutter filters (monthly).
  - i. Records required by 40 CFR Part 63, NESHAP, Subparts CCCCCC and XXXXXX where applicable.
8. Upon issuance of this permit, all previous Air Quality operating permits for this facility will be superseded and cancelled.

**MINOR SOURCE PERMIT TO OPERATE / CONSTRUCT  
AIR POLLUTION CONTROL FACILITY  
STANDARD CONDITIONS  
(February 13, 2020)**

- A. The issuing Authority for the permit is the Air Quality Division (AQD) of the Oklahoma Department of Environmental Quality (DEQ) in accordance with and under the authority of the Oklahoma Clean Air Act. The permit does not relieve the holder of the obligation to comply with other applicable federal, state, or local statutes, regulations, rules, or ordinances. This specifically includes compliance with the rules of the other Divisions of DEQ: Land Protection Division and Water Quality Division.
- B. A duly issued construction permit or authorization to construct or modify will terminate and become null and void (unless extended as provided in OAC 252:100-7-15(g)) if the construction is not commenced within 18 months after the date the permit or authorization was issued, or if work is suspended for more than 18 months after it is commenced. [OAC 252:100-7-15(f)]
- C. The recipient of a construction permit shall apply for a permit to operate (or modified operating permit) within 180 days following the first day of operation. [OAC 252:100-7-18(a)]
- D. Unless specified otherwise, the term of an operating permit shall be unlimited.
- E. Notification to the Air Quality Division of DEQ of the sale or transfer of ownership of this facility is required and shall be made in writing by the transferor within 30 days after such date. A new permit is not required. [OAC 252:100-7-2(f)]
- F. The following limitations apply to the facility unless covered in the Specific Conditions:
1. No person shall cause or permit the discharge of emissions such that National Ambient Air Quality Standards (NAAQS) are exceeded on land outside the permitted facility. [OAC 252:100-3]
  2. All facilities that emit air contaminants are required to file an emission inventory and pay annual operating fees based on the inventory. Instructions and forms are available on the Air Quality section of the DEQ web page. [www.deq.ok.gov](http://www.deq.ok.gov) [OAC 252:100-5]
  3. Deviations that result in emissions exceeding those allowed in this permit shall be reported consistent with the requirements of OAC 252:100-9, Excess Emission Reporting Requirements. [OAC 252:100-9]
  4. Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in the Open Burning subchapter. [OAC 252:100-13]
  5. No particulate emissions from new fuel-burning equipment with a rated heat input of 10 MMBTUH or less shall exceed 0.6 lbs/MMBTU. [OAC 252:100-19]
  6. No discharge of greater than 20% opacity is allowed except for short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity. [OAC 252:100-25]
  7. No visible fugitive dust emissions shall be discharged beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent

- properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. [OAC 252:100-29]
8. No sulfur oxide emissions from new gas-fired fuel-burning equipment shall exceed 0.2 lbs/MMBTU. No existing source shall exceed the listed ambient air standards for sulfur dioxide. [OAC 252:100-31]
  9. Volatile Organic Compound (VOC) storage tanks built after December 28, 1974, and with a capacity of 400 gallons or more storing a liquid with a vapor pressure of 1.5 psia or greater under actual conditions shall be equipped with a permanent submerged fill pipe or with an organic material vapor-recovery system. [OAC 252:100-37-15(b)]
  10. All fuel-burning equipment shall at all times be properly operated and maintained in a manner that will minimize emissions of VOCs. [OAC 252:100-37-36]
- G. Any owner or operator subject to provisions of NSPS shall provide written notification as follows: [40 CFR 60.7 (a)]
1. A notification of the date construction (or reconstruction as defined under §60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
  2. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in §60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
  3. A notification of the actual date of initial start-up of an affected facility postmarked within 15 days after such date.
  4. If a continuous emission monitoring system is included in the construction, a notification of the date upon which the test demonstrating the system performance will commence, along with a pretest plan, postmarked no less than 30 days prior to such a date.
- H. Any owner or operator subject to provisions of NSPS shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility or any malfunction of the air pollution control equipment. [40 CFR 60.7 (b)]
- I. Any owner or operator subject to the provisions of NSPS shall maintain a file of all measurements and other information required by this subpart recorded in a permanent file suitable for inspection. This file shall be retained for at least five years following the date of such measurements, maintenance, and records. [40 CFR 60.7 (f)]
- J. Any owner or operator subject to the provisions of NSPS shall conduct performance test(s) and furnish to AQD a written report of the results of such test(s). Test(s) shall be conducted within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up. [40 CFR 60.8]

Terex USA, LLC  
Attn.: Mr. Cody Rider, HSE Specialist  
9528 W I-40 Service Road  
Oklahoma City, OK 73128

SUBJECT: FESOP No. **2005-148-O (M-6)**  
Terex USA, LLC  
Oklahoma City Heavy Machinery Manufacturing Operation  
Facility ID: 258  
Section 1, Township 11N, Range 5W, Canadian County, Oklahoma

Dear Mr. Rider:

Enclosed is the permit authorizing operation of the referenced facility. Please note that this permit is issued subject to standard and specific conditions that are attached. These conditions must be carefully followed since they define the limits of the permit and will be confirmed by periodic inspections.

Also note that you are required to annually submit an emissions inventory for this facility. An emissions inventory must be completed through DEQ's electronic reporting system by April 1<sup>st</sup> of every year. Any questions concerning the submittal process should be referred to the Emissions Inventory Staff at (405) 702-4100.

Thank you for your cooperation in this matter. If we may be of further service, please contact me at [Junru.Wang@deq.ok.gov](mailto:Junru.Wang@deq.ok.gov), or at (405) 702-4197.

Sincerely,



Junru Wang, P.E.  
Existing Source Permits Section  
**AIR QUALITY DIVISION**

Enclosure

**Department of Environmental Quality (DEQ)**  
**Air Quality Division (AQD)**  
**Acronym List**  
**11-21-2024**

|                |   |                        |  |
|----------------|---|------------------------|--|
| <b>ACFM</b>    | Actual Cubic Feet per Minute                            | <b>GAL</b>             | Gallon (gal)   |
| <b>AD</b>      | Applicability Determination                             | <b>GDF</b>             | Gasoline Dispensing Facility                             |
| <b>AFRC</b>    | Air-to-Fuel Ratio Controller                            | <b>GEP</b>             | Good Engineering Practice                                |
| <b>API</b>     | American Petroleum Institute                            | <b>GHG</b>             | Greenhouse Gases   |
| <b>ASTM</b>    | American Society for Testing and Materials              | <b>GR</b>              | Grain(s) (gr)  |
| <b>AVO</b>     | Audio, Visual, or Olfactory                             | <b>H<sub>2</sub>CO</b> | Formaldehyde   |
| <b>BACT</b>    | Best Available Control Technology                       | <b>H<sub>2</sub>S</b>  | Hydrogen Sulfide   |
| <b>BAE</b>     | Baseline Actual Emissions                               | <b>HAP</b>             | Hazardous Air Pollutants                                 |
| <b>BBL</b>     | Barrel(s)   | <b>HC</b>              | Hydrocarbon  |
| <b>BHP</b>     | Brake Horsepower (bhp)                                  | <b>HCFC</b>            | Hydrochlorofluorocarbon                                  |
| <b>BTEX</b>    | Benzene, Toluene, Ethylbenzene, Xylene                  | <b>HFR</b>             | Horizontal Fixed Roof                                    |
| <b>BTU</b>     | British thermal unit (Btu)                              | <b>HON</b>             | Hazardous Organic NESHAP                                 |
| <b>C&amp;E</b> | Compliance and Enforcement                              | <b>HP</b>              | Horsepower (hp)  |
| <b>CAA</b>     | Clean Air Act   | <b>HR</b>              | Hour (hr)  |
| <b>CAM</b>     | Compliance Assurance Monitoring                         | <b>I&amp;M</b>         | Inspection and Maintenance                               |
| <b>CAS</b>     | Chemical Abstract Service                               | <b>IBR</b>             | Incorporation by Reference                               |
| <b>CAAA</b>    | Clean Air Act Amendments                                | <b>ICE</b>             | Internal Combustion Engine                               |
| <b>CC</b>      | Catalytic Converter                                     | <b>LAER</b>            | Lowest Achievable Emission Rate                          |
| <b>CCR</b>     | Continuous Catalyst Regeneration                        | <b>LB</b>              | Pound(s) [Mass] (lb, lbs, lbm)                           |
| <b>CD</b>      | Consent Decree  | <b>LB/HR</b>           | Pound(s) per Hour (lb/hr)                                |
| <b>CEM</b>     | Continuous Emission Monitor                             | <b>LDAR</b>            | Leak Detection and Repair                                |
| <b>CFC</b>     | Chlorofluorocarbon                                      | <b>LNG</b>             | Liquefied Natural Gas                                    |
| <b>CFR</b>     | Code of Federal Regulations                             | <b>LT</b>              | Long Ton(s) (metric)                                     |
| <b>CI</b>      | Compression Ignition                                    | <b>LPE</b>             | Legally and Practicably Enforceable                      |
| <b>CNG</b>     | Compressed Natural Gas                                  | <b>M</b>               | Thousand (Roman Numeral)                                 |
| <b>CO</b>      | Carbon Monoxide or Consent Order                        | <b>MAAC</b>            | Maximum Acceptable Ambient Concentration                 |
| <b>COA</b>     | Capable of Accommodating                                | <b>MACT</b>            | Maximum Achievable Control Technology                    |
| <b>COM</b>     | Continuous Opacity Monitor                              | <b>MM</b>              | Prefix used for Million (Thousand-Thousand)              |
| <b>D</b>       | Day   | <b>MMBTU</b>           | Million British Thermal Units (MMBtu)                    |
| <b>DEF</b>     | Diesel Exhaust Fluid                                    | <b>MMBTUH</b>          | Million British Thermal Units per Hour (MMBtu/hr)        |
| <b>DG</b>      | Demand Growth   | <b>MMSCF</b>           | Million Standard Cubic Feet (MMscf)                      |
| <b>DSCF</b>    | Dry Standard (At Standard Conditions) Cubic Foot (Feet) | <b>MMSCFD</b>          | Million Standard Cubic Feet per Day                      |
| <b>EGU</b>     | Electric Generating Unit                                | <b>MSDS</b>            | Material Safety Data Sheet                               |
| <b>EI</b>      | Emissions Inventory                                     | <b>MWC</b>             | Municipal Waste Combustor                                |
| <b>EPA</b>     | Environmental Protection Agency                         | <b>MWe</b>             | Megawatt Electrical                                      |
| <b>ESP</b>     | Electrostatic Precipitator                              | <b>NA</b>              | Nonattainment  |
| <b>EUG</b>     | Emissions Unit Group                                    | <b>NAAQS</b>           | National Ambient Air Quality Standards                   |
| <b>EUSGU</b>   | Electric Utility Steam Generating Unit                  | <b>NAICS</b>           | North American Industry Classification System            |
| <b>FCE</b>     | Full Compliance Evaluation                              | <b>NESHAP</b>          | National Emission Standards for Hazardous Air Pollutants |
| <b>FCCU</b>    | Fluid Catalytic Cracking Unit                           | <b>NH<sub>3</sub></b>  | Ammonia  |
| <b>FEL</b>     | Federally Enforceable Limit(s)                          | <b>NMHC</b>            | Non-methane Hydrocarbon                                  |
| <b>FIP</b>     | Federal Implementation Plan                             | <b>NGL</b>             | Natural Gas Liquids                                      |
| <b>FR</b>      | Federal Register  |                        |  |
| <b>GACT</b>    | Generally Achievable Control Technology                 |                        |  |

|                         |  |                         |                                       |
|-------------------------|--|-------------------------|---------------------------------------|
| <b>NO<sub>2</sub></b>   | Nitrogen Dioxide   | <b>SER</b>              | Significant Emission Rate             |
| <b>NO<sub>x</sub></b>   | Nitrogen Oxides  | <b>SI</b>               | Spark Ignition                        |
| <b>NOI</b>              | Notice of Intent   | <b>SIC</b>              | Standard Industrial Classification    |
| <b>NSCR</b>             | Non-Selective Catalytic Reduction                                  | <b>SIP</b>              | State Implementation Plan             |
| <b>NSPS</b>             | New Source Performance Standards                                   | <b>SNCR</b>             | Selective Non-Catalytic Reduction     |
| <b>NSR</b>              | New Source Review  | <b>SO<sub>2</sub></b>   | Sulfur Dioxide                        |
|                         |  | <b>SO<sub>x</sub></b>   | Sulfur Oxides                         |
| <b>O<sub>3</sub></b>    | Ozone  | <b>SOP</b>              | Standard Operating Procedure          |
| <b>O&amp;G</b>          | Oil and Gas  | <b>SRU</b>              | Sulfur Recovery Unit                  |
| <b>O&amp;M</b>          | Operation and Maintenance  |                         |                                       |
| <b>O&amp;NG</b>         | Oil and Natural Gas  | <b>T</b>                | Tons                                  |
| <b>OAC</b>              | Oklahoma Administrative Code                                       | <b>TAC</b>              | Toxic Air Contaminant                 |
| <b>OC</b>               | Oxidation Catalyst   | <b>TEG</b>              | Triethylene Glycol                    |
| <b>OGI</b>              | Optical Gas Imaging  | <b>THC</b>              | Total Hydrocarbons                    |
|                         |  | <b>TPY</b>              | Tons per Year                         |
| <b>PAH</b>              | Polycyclic Aromatic Hydrocarbons                                   | <b>TRS</b>              | Total Reduced Sulfur                  |
| <b>PAE</b>              | Projected Actual Emissions   | <b>TSP</b>              | Total Suspended Particulates          |
| <b>PAL</b>              | Plant-wide Applicability Limit                                     | <b>TV</b>               | Title V of the Federal Clean Air Act  |
| <b>Pb</b>               | Lead   |                         |                                       |
| <b>PBR</b>              | Permit by Rule   | <b>µg/m<sup>3</sup></b> | Micrograms per Cubic Meter            |
| <b>PCB</b>              | Polychlorinated Biphenyls  | <b>US EPA</b>           | U. S. Environmental Protection Agency |
| <b>PCE</b>              | Partial Compliance Evaluation                                      |                         |                                       |
| <b>PEA</b>              | Portable Emissions Analyzer  | <b>VFR</b>              | Vertical Fixed Roof                   |
| <b>PFAS</b>             | Per- and Polyfluoroalkyl Substance                                 | <b>VMT</b>              | Vehicle Miles Traveled                |
| <b>PM</b>               | Particulate Matter   | <b>VOC</b>              | Volatile Organic Compound             |
| <b>PM<sub>2.5</sub></b> | Particulate Matter with an Aerodynamic Diameter <= 2.5 Micrometers | <b>VOL</b>              | Volatile Organic Liquid               |
| <b>PM<sub>10</sub></b>  | Particulate Matter with an Aerodynamic Diameter <= 10 Micrometers  | <b>VRT</b>              | Vapor Recovery Tower                  |
| <b>POM</b>              | Particulate Organic Matter or Polycyclic Organic Matter            | <b>VRU</b>              | Vapor Recovery Unit                   |
|                         |  | <b>YR</b>               | Year                                  |
| <b>ppb</b>              | Parts per Billion  | <b>2SLB</b>             | 2-Stroke Lean Burn                    |
| <b>ppm</b>              | Parts per Million  | <b>4SLB</b>             | 4-Stroke Lean Burn                    |
| <b>ppmv</b>             | Parts per Million Volume   | <b>4SRB</b>             | 4-Stroke Rich Burn                    |
| <b>ppmvd</b>            | Parts per Million Dry Volume                                       |                         |                                       |
| <b>PSD</b>              | Prevention of Significant Deterioration                            |                         |                                       |
| <b>psi</b>              | Pounds per Square Inch   |                         |                                       |
| <b>psia</b>             | Pounds per Square Inch Absolute                                    |                         |                                       |
| <b>psig</b>             | Pounds per Square Inch Gage  |                         |                                       |
|                         |  |                         |                                       |
| <b>RACT</b>             | Reasonably Available Control Technology                            |                         |                                       |
| <b>RATA</b>             | Relative Accuracy Test Audit                                       |                         |                                       |
| <b>RAP</b>              | Regulated Air Pollutant or Reclaimed Asphalt Pavement              |                         |                                       |
| <b>RFG</b>              | Refinery Fuel Gas  |                         |                                       |
| <b>RICE</b>             | Reciprocating Internal Combustion Engine                           |                         |                                       |
| <b>RO</b>               | Responsible Official   |                         |                                       |
| <b>ROAT</b>             | Regional Office at Tulsa   |                         |                                       |
| <b>RVP</b>              | Reid Vapor Pressure  |                         |                                       |
|                         |  |                         |                                       |
| <b>SCC</b>              | Source Classification Code   |                         |                                       |
| <b>SCF</b>              | Standard Cubic Foot  |                         |                                       |
| <b>SCFD</b>             | Standard Cubic Feet per Day  |                         |                                       |
| <b>SCFM</b>             | Standard Cubic Feet per Minute                                     |                         |                                       |
| <b>SCR</b>              | Selective Catalytic Reduction                                      |                         |                                       |