

Statement of Basis

**Permit to Construct No. P-2015.0019
Project ID 61523**

**SME Steel
Pocatello, Idaho**

Facility ID 005-00043

Final

**May 26, 2016
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Permit Writer**

The purpose of this Statement of Basis is to satisfy the requirements of IDAPA 58.01.01. et seq, Rules for the Control of Air Pollution in Idaho, for issuing air permits.

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ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

| | |
|-------------------|--|
| AAC | acceptable ambient concentrations |
| AACC | acceptable ambient concentrations for carcinogens |
| Btu | British thermal units |
| CFR | Code of Federal Regulations |
| DEQ | Department of Environmental Quality |
| dscf | dry standard cubic feet |
| EL | screening emission levels |
| EPA | U.S. Environmental Protection Agency |
| HAP | hazardous air pollutants |
| IDAPA | a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act |
| MACT | Maximum Achievable Control Technology |
| MFHAP | metal fabrication hazardous air pollutants |
| NAAQS | National Ambient Air Quality Standard |
| NESHAP | National Emission Standards for Hazardous Air Pollutants |
| PM | particulate matter |
| PM _{2.5} | particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers |
| PM ₁₀ | particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers |
| PTC | permit to construct |
| PTE | potential to emit |
| <i>Rules</i> | <i>Rules for the Control of Air Pollution in Idaho</i> |
| scf | standard cubic feet |
| SM | synthetic minor |
| SM80 | synthetic minor facility with emissions greater than or equal to 80% of a major source threshold |
| T/hr | tons per hour |
| T/yr | tons per consecutive 12 calendar month period |
| TAP | toxic air pollutants |
| VOC | volatile organic compounds |

FACILITY INFORMATION

Description

SME Steel (SME) owns and operates a structural steel fabrication shop at 669 West Quinn Road in Pocatello, Idaho. Existing work at the shop includes design, fabrication and construction of various structural steel products such as I-beams and core braces. The tasks performed at the existing facility include cutting, grinding and welding of structural steel components. SME is proposing to add a sand blasting and painting operation at the existing facility.

As part of this application SME Steel submitted an exemption determination¹ for the existing operations at the facility. Based on this submittal, emissions of criteria air pollutants are less than BRC thresholds listed at IDAPA 58.01.01.221 and the identified toxic air pollutants (manganese, chromium compounds and nickel compounds) are regulated by 40 CFR 63 Subpart XXXXXX, Nine Metal Fabrication and Finishing Source Categories, and therefore qualify for an exclusion from the exemption determination analysis. Existing facility emissions, as presented in the submittal, qualify for an exemption from the need to obtain a permit (without regard to the proposed sandblasting and painting operations).

This permitting action is to add a sand blasting and painting operation at the existing facility. Additionally, DEQ has added the applicable provisions of 40 CFR 63 Subpart XXXXXX provisions for both new and existing affected sources.

Permitting History

This is the initial PTC for an existing exempt facility to add new operations, thus there is no permitting history.

Application Scope

This permit is the initial PTC for this facility.

The applicant has proposed to:

- Add an abrasive blasting operation; and
- Add a painting operation.

Application Chronology

| | |
|-----------------------|---|
| April 21, 2015 | DEQ received an application fee. |
| May 7, 2015 | DEQ received an application |
| May 19 – June 3, 2015 | DEQ provided an opportunity to request a public comment period on the application and proposed permitting action. |
| June 2, 2015 | DEQ determined that the application was incomplete. |
| October 6, 2015 | DEQ received supplemental information from the applicant. |
| October 16, 2015 | DEQ determined that the application was incomplete. |
| November 18, 2015 | DEQ received supplemental information from the applicant. |
| December 8, 2015 | DEQ determined that the application was incomplete. |
| February 3, 2016 | DEQ received supplemental information from the applicant. |

¹ DEQ TRIM record number 2016AAG509

| | |
|----------------|---|
| March 3, 2016 | DEQ determined that the application was complete. |
| April 18, 2016 | DEQ made available the draft permit and statement of basis for peer and regional office review. |
| April 25, 2016 | DEQ made available the draft permit and statement of basis for applicant review. |
| May 23, 2016 | DEQ received the permit processing fee. |

TECHNICAL ANALYSIS

Emissions Units and Control Equipment

Table 1 EMISSIONS UNIT AND CONTROL EQUIPMENT INFORMATION

| Sources | Control Equipment |
|-------------------|--|
| Abrasive Blasting | 3 sided enclosure |
| Painting | 1) Airless Spray Guns 2) Painting in a room with a ventilation system that is equipped with a filter that removes 90% of PM ₁₀ |

Emissions Inventories

Uncontrolled Potential to Emit

Using the definition of potential to emit, uncontrolled potential to emit is then defined as the maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall **not** be treated as part of its design **since** the limitation or the effect it would have on emissions **is not** state or federally enforceable.

Table 2 UNCONTROLLED FACILITY-WIDE POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

| Source | PM ₁₀ /PM _{2.5} | VOC |
|-----------------------------|-------------------------------------|----------------|
| | T/yr | T/yr |
| Welding | < 5 | - |
| Abrasive Blasting | < 9 | - |
| Painting | < 5 | < 50 |
| Total, Point Sources | < 19 | < 50 |

The uncontrolled potential to emit was estimated assuming 657 tons per year of abrasive blasting media is used per year, 4,944 gallons of paint is used per year, and 450,000 pounds of welding rod are used per year.

The uncontrolled potential to emit of hazardous air pollutants was not precisely calculated. If it is assumed that 50% of the potential VOC emissions are presumed to be HAP then the uncontrolled HAP emissions is 25 tons per year.

Controlled Potential to Emit

The controlled potential to emit is used to establish the change in emissions at a facility and to determine the facility's classification as a result of this project. Post project potential to emit includes all permit limits resulting from this project.

The following table presents the controlled potential to emit for criteria pollutants from all emissions units at the facility as determined by DEQ staff. See Appendix A for a detailed presentation of the calculations of these emissions for each emissions unit.

Table 3 CCONTROLLED FACILITY-WIDE POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

| Source | PM ₁₀ | PM _{2.5} | VOC |
|-----------------------|---------------------|---------------------|---------------------|
| | T/yr ^(a) | T/yr ^(a) | T/yr ^(a) |
| Welding | 1.03 | 0.98 | - |
| Abrasive Blasting | 1.37 | 0.14 | - |
| Painting | 0.062 | 0.062 | 25 |
| Project Totals | 2.462 | 1.182 | 25 |

a) Controlled average emission rate in tons per year is an annual average, based on the proposed annual operating schedule and annual limits.

TAP Emissions

The permit limits daily toxic air pollutant emissions so they do not exceed the EL (lb/hr) multiplied by 24 (for TAPs listed in both IDAPA 58.01.01.585 and 586), or limits emissions such that they do not exceed the acceptable ambient concentration (mg/m³) (for TAPs listed in IDAPA 58.01.01.585) and the acceptable ambient concentration for carcinogens (µg/m³) (for TAPs listed in IDAPA 58.01.01.586).

The permit requires keeping records of emissions daily and annually, reporting whenever a modeling exercise is conducted to show that impacts are below acceptable ambient concentrations.

These permit conditions are consistent with permit conditions that have been issued to Charmac Trailers², Guerdon Enterprises³, and Koontz Wagner⁴. The applicant requested that they be issued these types of permit conditions.

HAP Emissions

Facility-wide HAP emissions are limited by the permit to be less than 10 tons per any consecutive 12 month period for any individual HAP, and to less than 25 tons per any consecutive 12 month period for all HAPs combined. The facility shall keep records and demonstrate monthly that emissions are below these limits.

Ambient Air Quality Impact Analyses

PM₁₀ and PM_{2.5} Emissions increases for this project, which is for the addition of an abrasive blasting operation and a painting operation, are 1.43 and 0.2 tons per year respectively. These rates are below the BRC modeling threshold and modeling is not required for these pollutants. The only other criteria pollutant is VOC and the permitted emission rate is 25 tons per year, modeling is not required for this level of VOC emissions.

Toxic air pollutants are limited by the permit to be below the screening emission level or below the acceptable ambient concentration. No modeling was conducted as part of this permit. If modeling is conducted as required by this permit the permittee shall submit a modeling report to DEQ after they have conducted the analysis.

REGULATORY ANALYSIS

Attainment Designation (40 CFR 81.313)

The facility is located in Bannock County, which is designated as attainment or unclassifiable for PM_{2.5}, PM₁₀, SO₂, NO₂, CO, and Ozone. Refer to 40 CFR 81.313 for additional information.

Facility Classification

The AIRS/AFS facility classification codes are as follows:

For THAPs (Total Hazardous Air Pollutants) Only:

2 Charmac Trailers, PTC P-2009.0095 issued January 6, 2010
 3 Guerdon Enterprises, LLC, PTC P-201.0018 issued September 2, 2014
 4 Koontz Wagner, PTC P-2014.0026 issued January 22, 2016

- A = Use when any one HAP has actual or potential emissions ≥ 10 T/yr or if the aggregate of all HAPS (Total HAPs) has actual or potential emissions ≥ 25 T/yr.
- SM80 = Use if a synthetic minor (potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable limitations) and the permit sets limits ≥ 8 T/yr of a single HAP or ≥ 20 T/yr of THAP.
- SM = Use if a synthetic minor (potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable limitations) and the potential HAP emissions are limited to < 8 T/yr of a single HAP and/or < 20 T/yr of THAP.
- B = Use when the potential to emit without permit restrictions is below the 10 and 25 T/yr major source threshold
- UNK = Class is unknown

For All Other Pollutants:

- A = Actual or potential emissions of a pollutant are ≥ 100 T/yr.
- SM80 = Use if a synthetic minor for the applicable pollutant (potential emissions fall below 100 T/yr if and only if the source complies with federally enforceable limitations) and potential emissions of the pollutant are ≥ 80 T/yr.
- SM = Use if a synthetic minor for the applicable pollutant (potential emissions fall below 100 T/yr if and only if the source complies with federally enforceable limitations) and potential emissions of the pollutant are < 80 T/yr.
- B = Actual and potential emissions are < 100 T/yr without permit restrictions.
- UNK = Class is unknown.

Table 3 REGULATED AIR POLLUTANT FACILITY CLASSIFICATION

| Pollutant | Uncontrolled PTE (T/yr) | Permitted PTE (T/yr) | Major Source Thresholds (T/yr) | AIRS/AFS Classification |
|-------------------------------------|-------------------------|----------------------|--------------------------------|-------------------------|
| PM | <19 | 2.5 | 100 | B |
| PM ₁₀ /PM _{2.5} | <19 | 1.03 | 100 | B |
| SO ₂ | <1 | <1 | 100 | B |
| NO _x | <100 | <80 | 100 | B |
| CO | <1 | <80 | 100 | B |
| VOC | <50 | 25 | 100 | B |
| HAP (single) | >10 | <10 | 10 | SM80 |
| HAP (Total) | >25 | <25 | 25 | SM80 |

Permit to Construct (IDAPA 58.01.01.201)

IDAPA 58.01.01.201 Permit to Construct Required

The permittee has requested that a PTC be issued to the facility for the proposed new abrasive blasting and painting emissions sources. Therefore, a permit to construct is required to be issued in accordance with IDAPA 58.01.01.220. This permitting action was processed in accordance with the procedures of IDAPA 58.01.01.200-228.

Tier II Operating Permit (IDAPA 58.01.01.401)

IDAPA 58.01.01.401 Tier II Operating Permit

The application was submitted for a permit to construct (refer to the Permit to Construct section), and an optional Tier II operating permit has not been requested. Therefore, the procedures of IDAPA 58.01.01.400–410 were not applicable to this permitting action.

Visible Emissions (IDAPA 58.01.01.625)

IDAPA 58.01.01.625..... Visible Emissions

The sources of PM emissions at this facility are subject to the State of Idaho visible emissions standard of 20% opacity.

Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70)

IDAPA 58.01.01.301 Requirement to Obtain Tier I Operating Permit

Post project facility-wide emissions from this facility do not have a potential to emit greater than 100 tons per year for PM₁₀, PM_{2.5}, SO₂, NO_x, CO, and VOC or 10 tons per year for any one HAP or 25 tons per year for all HAP combined as demonstrated previously in the Emissions Inventories Section of this analysis. Therefore, the facility is not a Tier I source in accordance with IDAPA 58.01.01.006 and the requirements of IDAPA 58.01.01.301 do not apply.

PSD Classification (40 CFR 52.21)

40 CFR 52.21 Prevention of Significant Deterioration of Air Quality

The facility is not a major stationary source as defined in 40 CFR 52.21(b)(1), nor is it undergoing any physical change that would constitute a major stationary source by itself as defined in 40 CFR 52. Therefore in accordance with 40 CFR 52.21(a)(2), PSD requirements are not applicable to this permitting action. The facility is not a designated facility as defined in 40 CFR 52.21(b)(1)(i)(a), and does not have facility-wide emissions of any criteria pollutant that exceed 250 T/yr.

NSPS Applicability (40 CFR 60)

The facility does not have any emissions units affected by any Subpart of 40 CFR 60.

NESHAP Applicability (40 CFR 61)

The facility does not have any emissions units affected by any Subpart of 40 CFR 61.

MACT Applicability (40 CFR 63)

40 CFR 63, Subpart XXXXXX - NESHAP for Area Source Standards for Nine Metal Fabrication and Finishing Source Categories

DEQ has not been delegated this subpart.

The applicable requirements of the subpart are underlined.

73 FR 43000, July 23, 2008, 40 CFR 63, Subpart XXXXXX - NESHAP for Area Source Standards for Nine Metal Fabrication and Finishing Source Categories

§ 63.11514 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate 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.

- (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.

SME Steel primarily fabricates metal products and engages in the manufacturing of structural metal products which are listed as the nine source categories subject to the requirements of this Subpart (SIC Code 3441 and NAICS Code 332312). Therefore, this facility is subject to the requirements of Subpart XXXXXX.

(a) Dry abrasive blasting standards. If you own or operate a new or existing dry abrasive blasting affected source, you must comply with the requirements in paragraphs (a)(1) through (3) of this section, as applicable, for each dry abrasive blasting operation that uses materials that contain MFHAP, as defined in §63.11522, “What definitions apply to this subpart?,” or has the potential to emit MFHAP. These requirements do not apply when abrasive blasting operations are being performed that do not use any materials containing MFHAP or do not have the potential to emit MFHAP.

(1) *Standards for dry abrasive blasting of objects performed in totally enclosed and unvented blast chambers.* If you own or operate a new or existing dry abrasive blasting affected source which consists of an abrasive blasting chamber that is totally enclosed and unvented, as defined in §63.11522, “What definitions apply to this subpart?,” you must implement management practices to minimize emissions of MFHAP. These management practices are the practices specified in paragraph (a)(1)(i) and (ii) of this section.

(i) You must minimize dust generation during emptying of abrasive blasting enclosures; and

(ii) You must operate all equipment associated with dry abrasive blasting operations according to the manufacturer's instructions.

SME Steel does not perform dry abrasive blasting of objects in a totally enclosed and unvented blast chambers. Therefore, this Subsection of Subpart XXXXXX does not apply and no further discussion is required.

(2) *Standards for dry abrasive blasting of objects performed in vented enclosures.* If you own or operate a new or existing dry abrasive blasting affected source which consists of a dry abrasive blasting operation which has a vent allowing any air or blast material to escape, you must comply with the requirements in paragraphs (a)(2)(i) and (ii) of this section. Dry abrasive blasting operations for which the items to be blasted exceed 8 feet (2.4 meters) in any dimension, may be performed subject to the requirements in paragraph (a)(3) of this section.

(i) You must capture emissions and vent them to a filtration control device. You must operate the filtration control device according to manufacturer's instructions, and you must demonstrate compliance with this requirement by maintaining a record of the manufacturer's specifications for the filtration control devices, as specified by the requirements in §63.11519(c)(4), “What are my notification, recordkeeping, and reporting requirements?”

(ii) You must implement the management practices to minimize emissions of MFHAP as specified in paragraphs (a)(2)(ii)(A) through (C) of this section.

(A) You must take measures necessary to minimize excess dust in the surrounding area to reduce MFHAP emissions, as practicable; and

(B) You must enclose dusty abrasive material storage areas and holding bins, seal chutes and conveyors that transport abrasive materials; and

(C) You must operate all equipment associated with dry abrasive blasting operations according to manufacturer's instructions.

SME Steel does not perform dry abrasive blasting of objects in vented enclosures. Therefore, this Subsection of Subpart XXXXXX does not apply and no further discussion is required.

(3) Standards for dry abrasive blasting of objects greater than 8 feet (2.4 meters) in any one dimension. If you own or operate a new or existing dry abrasive blasting affected source which consists of a dry abrasive blasting operation which is performed on objects greater than 8 feet (2.4 meters) in any one dimension, you may implement management practices to minimize emissions of MFHAP as specified in paragraph (a)(3)(i) of this section instead of the practices required by paragraph (a)(2) of this section. You must demonstrate that management practices are being implemented by complying with the requirements in paragraphs (a)(3)(ii) through (iv) of this section.

(i) Management practices for dry abrasive blasting of objects greater than 8 feet (2.4 meters) in any one dimension are specified in paragraphs (a)(3)(i)(A) through (E) of this section.

(A) You must take measures necessary to minimize excess dust in the surrounding area to reduce MFHAP emissions, as practicable; and

(B) You must enclose abrasive material storage areas and holding bins, seal chutes and conveyors that transport abrasive material; and

(C) You must operate all equipment associated with dry abrasive blasting operations according to manufacturer's instructions; and

(D) You must not re-use dry abrasive blasting media unless contaminants (i.e., any material other than the base metal, such as paint residue) have been removed by filtration or screening, and the abrasive material conforms to its original size; and

(E) Whenever practicable, you must switch from high particulate matter (PM)-emitting blast media (e.g., sand) to low PM-emitting blast media (e.g., crushed glass, specular hematite, steel shot, aluminum oxide), where PM is a surrogate for MFHAP.

(ii) You must perform visual determinations of fugitive emissions, as specified in §63.11517(b), "What are my monitoring requirements?," according to paragraphs (a)(3)(ii)(A) or (B) of this section, as applicable.

(A) For abrasive blasting of objects greater than 8 feet (2.4 meters) in any one dimension that is performed outdoors, you must perform visual determinations of fugitive emissions at the fenceline or property border nearest to the outdoor dry abrasive blasting operation.

(B) For abrasive blasting of objects greater than 8 feet (2.4 meters) in any one dimension that is performed indoors, you must perform visual determinations of fugitive emissions at the primary vent, stack, exit, or opening from the building containing the abrasive blasting operations.

(iii) You must keep a record of all visual determinations of fugitive emissions along with any corrective action taken in accordance with the requirements in §63.11519(c)(2), "What are my notification, recordkeeping, and reporting requirements?"

(iv) If visible fugitive emissions are detected, you must perform corrective actions until the visible fugitive emissions are eliminated, at which time you must comply with the requirements in paragraphs (a)(3)(iv)(A) and (B) of this section.

(A) You must perform a follow-up inspection for visible fugitive emissions in accordance with §63.11517(a), "Monitoring Requirements."

(B) You must report all instances where visible emissions are detected, along with any corrective action taken and the results of subsequent follow-up inspections for visible emissions, with your annual certification and compliance report as required by §63.11519(b)(5), "Notification, recordkeeping, and reporting requirements."

SME has proposed to use dry abrasive blasting of objects greater than 8 feet (2.4 meters) in any one dimension.

(b) Standards for machining. If you own or operate a new or existing machining affected source, you must implement management practices to minimize emissions of MFHAP as specified in paragraph (b)(1) and (2) of this section for each machining operation that uses materials that contain MFHAP, as defined in §63.11522, "What definitions apply to this subpart?", or has the potential to emit MFHAP. These requirements do not apply when machining operations are being performed that do not use any materials containing MFHAP and do not have the potential to emit MFHAP.

(1) You must take measures necessary to minimize excess dust in the surrounding area to reduce MFHAP emissions, as practicable; and

(2) You must operate all equipment associated with machining according to manufacturer's instructions.

(c) Standards for dry grinding and dry polishing with machines. If you own or operate a new or existing dry grinding and dry polishing with machines affected source, you must comply with the requirements of paragraphs (c)(1) and (2) of this section for each dry grinding and dry polishing with machines operation that uses materials that contain MFHAP, as defined in §63.11522, “What definitions apply to this subpart?,” or has the potential to emit MFHAP. These requirements do not apply when dry grinding and dry polishing operations are being performed that do not use any materials containing MFHAP and do not have the potential to emit MFHAP.

(1) You must capture emissions and vent them to a filtration control device. You must demonstrate compliance with this requirement by maintaining a record of the manufacturer's specifications for the filtration control devices, as specified by the requirements in §63.11519(c)(4), “Notification, recordkeeping, and reporting requirements.”

(2) You must implement management practices to minimize emissions of MFHAP as specified in paragraphs (c)(2)(i) and (ii) of this section.

(i) You must take measures necessary to minimize excess dust in the surrounding area to reduce MFHAP emissions, as practicable;

(ii) You must operate all equipment associated with the operation of dry grinding and dry polishing with machines, including the filtration control device, according to manufacturer's instructions.

SME Steel did not specify in the application if it does perform dry grinding and dry polishing with machines. However, these requirements were added to the permit if the facility does engage in this activity; it is expected that the facility has at least one stationary grinder.

(d) Standards for control of MFHAP in spray painting. If you own or operate a new or existing spray painting affected source, as defined in §63.11514 (b)(4), “Am I subject to this subpart?,” you must implement the management practices in paragraphs (d)(1) through (9) of this section when a spray-applied paint that contains MFHAP is being applied. These requirements do not apply when spray-applied paints that do not contain MFHAP are being applied.

(1) Standards for spray painting for MFHAP control. All spray-applied painting of objects must meet the requirements of paragraphs (d)(1)(i) through (iii) of this section. These requirements do not apply to affected sources located at Fabricated Structural Metal Manufacturing facilities, as described in Table 1, “Description of Source Categories Affected by this Subpart,” or affected sources that spray paint objects greater than 15 feet (4.57 meters), that are not spray painted in spray booths or spray rooms.

(i) 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. The roof may contain narrow slots for connecting fabricated products to overhead cranes, and/or for cords or cables.

(ii) All spray booths or spray rooms must be fitted with a type of filter technology that is demonstrated to achieve at least 98 percent capture of MFHAP. The procedure used to demonstrate filter efficiency must be consistent with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Method 52.1, “Gravimetric and Dust-Spot Procedures for Testing Air-Cleaning Devices Used in General Ventilation for Removing Particulate Matter, June 4, 1992” (incorporated by reference, see §63.14). The test coating for measuring filter efficiency shall be a high-solids bake enamel delivered at a rate of at least 135 grams per minute from a conventional (non-High Volume Low Pressure) air-atomized spray gun operating at 40 psi air pressure; the air flow rate across the filter shall be 150 feet per minute. Owners and operators may use published filter efficiency data provided by filter vendors to demonstrate compliance with this requirement and are not required to perform this measurement.

(iii) You must perform regular inspection and replacement of the filters in all spray booths or spray rooms according to manufacturer's instructions, and maintain documentation of these activities, as detailed in §63.11519(c)(5), “Notification, recordkeeping, and reporting requirements.”

(iv) As an alternative compliance requirement, spray booths or spray rooms equipped with a water curtain, called “waterwash” or “waterspray” booths or spray rooms that are operated and maintained according to the manufacturer's specifications and that achieve at least 98 percent control of MFHAP, may be used in lieu of the spray booths or spray rooms requirements of paragraphs (d)(1)(i) through (iii) of this section.

(2) Standards for spray painting application equipment of all objects painted for MFHAP control. All paints applied via spray-applied painting must be applied with a high-volume, low-pressure (HVLP) spray gun, electrostatic application, airless spray gun, air-assisted airless spray gun, or an equivalent technology that is demonstrated to achieve transfer efficiency comparable to one of these spray gun technologies for a comparable operation, and for which written approval has been obtained from the Administrator. The procedure used to demonstrate that spray gun transfer efficiency is equivalent to that of an HVLP spray gun must be equivalent to the California South Coast Air Quality Management District's “Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989” and “Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002”, Revision 0 (incorporated by reference, see §63.14).

(3) Spray system recordkeeping. You must maintain documentation of the HVLP or other high transfer efficiency spray paint delivery methods, as detailed in §63.11519(c)(7), “Notification, recordkeeping, and reporting requirements.”

(4) Spray gun cleaning. All cleaning of paint spray guns must be done with either non-HAP gun 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. Spray gun cleaning may be done with, for example, by hand cleaning of parts of the disassembled gun in a container of solvent, by flushing solvent through the gun without atomizing the solvent and paint residue, or by using a fully enclosed spray gun washer. A combination of these non-atomizing methods may also be used.

(5) Spray painting worker certification. 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. The minimum requirements for training and certification are described in paragraph (d)(6) of this section. The spray application of paint is prohibited by persons who are not certified as having completed the training described in paragraph (d)(6) of this section. The requirements of this paragraph do not apply to the students of an accredited painting training program who are under the direct supervision of an instructor who meets the requirements of this paragraph. The requirements of this paragraph do not apply to operators of robotic or automated painting operations.

(6) Spray painting training program content. Each owner or operator of an affected spray painting affected source must ensure and certify that all new and existing personnel, including contract personnel, who spray apply paints are trained in the proper application of paints as required by paragraph (d)(5) of this section. The training program must include, at a minimum, the items listed in paragraphs (d)(6)(i) through (iii) of this section.

(i) A list of all current personnel by name and job description who are required to be trained;

(ii) Hands-on, or in-house or external classroom instruction that addresses, at a minimum, initial and refresher training in the topics listed in paragraphs (d)(6)(ii)(A) through (D) of this section.

(A) Spray gun equipment selection, set up, and operation, including measuring paint viscosity, selecting the proper fluid tip or nozzle, and achieving the proper spray pattern, air pressure and volume, and fluid delivery rate.

(B) Spray technique for different types of paints to improve transfer efficiency and minimize paint usage and overspray, including maintaining the correct spray gun distance and angle to the part, using proper banding and overlap, and reducing lead and lag spraying at the beginning and end of each stroke.

(C) Routine spray booth and filter maintenance, including filter selection and installation.

(D) Environmental compliance with the requirements of this subpart.

(iii) A description of the methods to be used at the completion of initial or refresher training to demonstrate, document, and provide certification of successful completion of the required training. Alternatively, owners and operators who can show by documentation or certification that a painter's work experience and/or training has resulted in training equivalent to the training required in paragraph (d)(6)(ii) of this section are not required to provide the initial training required by that paragraph to these painters.

(7) Records of spray painting training. You must maintain records of employee training certification for use of HVLP or other high transfer efficiency spray paint delivery methods as detailed in §63.11519(c)(8), "Notification, recordkeeping, and reporting requirements."

(8) Spray painting training dates. As required by paragraph (d)(5) of this section, all new and existing personnel at an affected spray painting affected source, including contract personnel, who spray apply paints must be trained by the dates specified in paragraphs (d)(8)(i) and (ii) of this section.

(i) If your source is a new source, all personnel must be trained and certified no later than January 20, 2009, 180 days after startup, or 180 days after hiring, whichever is later. Training that was completed within 5 years prior to the date training is required, and that meets the requirements specified in paragraph (d)(6)(ii) of this section satisfies this requirement and is valid for a period not to exceed 5 years after the date the training is completed.

(ii) If your source is an existing source, all personnel must be trained and certified no later than July 25, 2011, or 180 days after hiring, whichever is later. Worker training that was completed within 5 years prior to the date training is required, and that meets the requirements specified in paragraph (d)(6)(ii) of this section, satisfies this requirement and is valid for a period not to exceed 5 years after the date the training is completed.

(9) Duration of training validity. Training and certification will be valid for a period not to exceed 5 years after the date the training is completed. All personnel must receive refresher training that meets the requirements of this section and be re-certified every 5 years.

SME Steel does not perform spray painting with materials that contain MFHAP or that have the potential to emit MFHAP. Therefore, this Subsection of Subpart XXXXXX does not apply and no further discussion is required.

(f) Standards for welding. If you own or operate a new or existing welding affected source, you must comply with the requirements in paragraphs (f)(1) and (2) of this section for each welding operation that uses materials that contain MFHAP, as defined in §63.11522, "What definitions apply to this subpart?," or has the potential to emit MFHAP. If your welding affected source uses 2,000 pounds or more per year of welding rod containing one or more MFHAP (calculated on a rolling 12-month basis), you must demonstrate that management practices or fume control measures are being implemented by complying with the requirements in paragraphs (f)(3) through (8) of this section. The requirements in paragraphs (f)(1) through (8) of this section do not apply when welding operations are being performed that do not use any materials containing MFHAP or do not have the potential to emit MFHAP.

(1) You must operate all equipment, capture, and control devices associated with welding operations according to manufacturer's instructions. You must demonstrate compliance with this requirement by maintaining a record of the manufacturer's specifications for the capture and control devices, as specified by the requirements in §63.11519(c)(4), "Notification, recordkeeping, and reporting requirements."

(2) You must implement one or more of the management practices specified in paragraphs (f)(2)(i) through (v) of this section to minimize emissions of MFHAP, as practicable, while maintaining the required welding quality through the application of sound engineering judgment.

(i) Use welding processes with reduced fume generation capabilities (e.g., gas metal arc welding (GMAW)—also called metal inert gas welding (MIG));

(ii) Use welding process variations (e.g., pulsed current GMAW), which can reduce fume generation rates;

(iii) Use welding filler metals, shielding gases, carrier gases, or other process materials which are capable of reduced welding fume generation;

(iv) 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

(v) Use a welding fume capture and control system, operated according to the manufacturer's specifications.

(3) Tier 1 compliance requirements for welding. You must perform visual determinations of welding fugitive emissions as specified in §63.11517(b), "Monitoring requirements," at the primary vent, stack, exit, or opening from the building containing the welding operations. You must keep a record of all visual determinations of fugitive emissions along with any corrective action taken in accordance with the requirements in §63.11519(c)(2), "Notification, recordkeeping, and reporting requirements."

(4) Requirements upon initial detection of visible emissions from welding. If visible fugitive emissions are detected during any visual determination required in paragraph (f)(3) of this section, you must comply with the requirements in paragraphs (f)(4)(i) and (ii) of this section.

(i) Perform corrective actions that include, but are not limited to, inspection of welding fume sources, and evaluation of the proper operation and effectiveness of the management practices or fume control measures implemented in accordance with paragraph (f)(2) of this section. After completing such corrective actions, you must perform a follow-up inspection for visible fugitive emissions in accordance with §63.11517(a), "Monitoring Requirements," at the primary vent, stack, exit, or opening from the building containing the welding operations.

(ii) Report all instances where visible emissions are detected, along with any corrective action taken and the results of subsequent follow-up inspections for visible emissions, and submit with your annual certification and compliance report as required by §63.11519(b)(5), "Notification, recordkeeping, and reporting requirements."

(5) Tier 2 requirements upon subsequent detection of visible emissions. If visible fugitive emissions are detected more than once during any consecutive 12 month period (notwithstanding the results of any follow-up inspections), you must comply with paragraphs (f)(5)(i) through (iv) of this section.

(i) Within 24 hours of the end of the visual determination of fugitive emissions in which visible fugitive emissions were detected, you must conduct a visual determination of emissions opacity, as specified in §63.11517(c), "Monitoring requirements," at the primary vent, stack, exit, or opening from the building containing the welding operations.

(ii) In lieu of the requirement of paragraph (f)(3) of this section to perform visual determinations of fugitive emissions with EPA Method 22, you must perform visual determinations of emissions opacity in accordance with §63.11517(d), "Monitoring Requirements," using EPA Method 9, at the primary vent, stack, exit, or opening from the building containing the welding operations.

(iii) You must keep a record of each visual determination of emissions opacity performed in accordance with paragraphs (f)(5)(i) or (ii) of this section, along with any subsequent corrective action taken, in accordance with the requirements in §63.11519(c)(3), "Notification, recordkeeping, and reporting requirements."

(iv) You must report the results of all visual determinations of emissions opacity performed in accordance with paragraphs (f)(5)(i) or (ii) of this section, along with any subsequent corrective action taken, and submit with your annual certification and compliance report as required by §63.11519(b)(6), "Notification, recordkeeping, and reporting requirements."

(6) Requirements for opacities less than or equal to 20 percent but greater than zero. For each visual determination of emissions opacity performed in accordance with paragraph (f)(5) of this section for which the average of the six-minute average opacities recorded is 20 percent or less but greater than zero, you must perform corrective actions, including inspection of all welding fume sources, and evaluation of the proper operation and effectiveness of the management practices or fume control measures implemented in accordance with paragraph (f)(2) of this section.

(7) Tier 3 requirements for opacities exceeding 20 percent. For each visual determination of emissions opacity performed in accordance with paragraph (f)(5) of this section for which the average of the six-minute average opacities recorded exceeds 20 percent, you must comply with the requirements in paragraphs (f)(7)(i) through (v) of this section.

(i) You must submit a report of exceedence of 20 percent opacity, along with your annual certification and compliance report, as specified in §63.11519(b)(8), "Notification, recordkeeping, and reporting requirements," and according to the requirements of §63.11519(b)(1), "Notification, recordkeeping, and reporting requirements."

(ii) Within 30 days of the opacity exceedence, you must prepare and implement a Site-Specific Welding Emissions Management Plan, as specified in paragraph (f)(8) of this section. If you have already prepared a Site-Specific Welding Emissions Management Plan in accordance with this paragraph, you must prepare and implement a revised Site-Specific Welding Emissions Management Plan within 30 days.

(iii) During the preparation (or revision) of the Site-Specific Welding Emissions Management Plan, you must continue to perform visual determinations of emissions opacity, beginning on a daily schedule as specified in §63.11517(d), "Monitoring Requirements," using EPA Method 9, at the primary vent, stack, exit, or opening from the building containing the welding operations.

(iv) You must maintain records of daily visual determinations of emissions opacity performed in accordance with paragraph (f)(7)(iii) of this section, during preparation of the Site-Specific Welding Emissions Management Plan, in accordance with the requirements in §63.11519(b)(9), "Notification, recordkeeping, and reporting requirements."

(v) You must include these records in your annual certification and compliance report, according to the requirements of §63.11519(b)(1), "Notification, recordkeeping, and reporting requirements."

(8) Site-Specific Welding Emissions Management Plan. The Site-Specific Welding Emissions Management Plan must comply with the requirements in paragraphs (f)(8)(i) through (iii) of this section.

(i) Site-Specific Welding Emissions Management Plan must contain the information in paragraphs (f)(8)(i)(A) through (F) of this section.

(A) Company name and address;

(B) A list and description of all welding operations which currently comprise the welding affected source;

(C) A description of all management practices and/or fume control methods in place at the time of the opacity exceedence;

(D) A list and description of all management practices and/or fume control methods currently employed for the welding affected source;

(E) A description of additional management practices and/or fume control methods to be implemented pursuant to paragraph (f)(7)(ii) of this section, and the projected date of implementation; and

(F) Any revisions to a Site-Specific Welding Emissions Management Plan must contain copies of all previous plan entries, pursuant to paragraphs (f)(8)(i)(D) and (E) of this section.

(ii) The Site-Specific Welding Emissions Management Plan must be updated annually to contain current information, as required by paragraphs (f)(8)(i)(A) through (C) of this section, and submitted with your annual certification and compliance report, according to the requirements of §63.11519(b)(1), “Notification, recordkeeping, and reporting requirements.”

(iii) You must maintain a copy of the current Site-Specific Welding Emissions Management Plan in your records in a readily-accessible location for inspector review, in accordance with the requirements in §63.11519(c)(12), “Notification, recordkeeping, and reporting requirements.”

SME Steel does perform welding and these requirements are included in the permit.

§ 63.11517

What are my monitoring requirements?

(a) Visual determination of fugitive emissions, general. Visual determination of fugitive emissions must be performed according to the procedures of EPA Method 22, of 40 CFR part 60, Appendix A-7. You must conduct the EPA Method 22 test while the affected source is operating under normal conditions. The duration of each EPA Method 22 test must be at least 15 minutes, and visible emissions will be considered to be present if they are detected for more than six minutes of the fifteen minute period.

(b) Visual determination of fugitive emissions, graduated schedule. Visual determinations of fugitive emissions must be performed in accordance with paragraph (a) of this section and according to the schedule in paragraphs (b)(1) through (4) of this section.

(1) Daily Method 22 Testing. Perform visual determination of fugitive emissions once per day, on each day the process is in operation, during operation of the process.

(2) Weekly Method 22 Testing. If no visible fugitive emissions are detected in consecutive daily EPA Method 22 tests, performed in accordance with paragraph (b)(1) of this section for 10 days of work day operation of the process, you may decrease the frequency of EPA Method 22 testing to once every five days of operation of the process (one calendar week). If visible fugitive emissions are detected during these tests, you must resume EPA Method 22 testing of that operation once per day during each day that the process is in operation, in accordance with paragraph (b)(1) of this section.

(3) Monthly Method 22 Testing. If no visible fugitive emissions are detected in four consecutive weekly EPA Method 22 tests performed in accordance with paragraph (b)(2) of this section, you may decrease the frequency of EPA Method 22 testing to once per 21 days of operation of the process (one calendar month). If visible fugitive emissions are detected during these tests, you must resume weekly EPA Method 22 in accordance with paragraph (b)(2) of this section.

(4) Quarterly Method 22 Testing. If no visible fugitive emissions are detected in three consecutive monthly EPA Method 22 tests performed in accordance with paragraph (b)(3) of this section, you may decrease the frequency of EPA Method 22 testing to once per 60 days of operation of the process (3 calendar months). If visible fugitive emissions are detected during these tests, you must resume monthly EPA Method 22 in accordance with paragraph (b)(3) of this section.

SME Steel is required to perform a visual determination of fugitive emissions.

(c) Visual determination of emissions opacity for welding Tier 2 or 3, general. Visual determination of emissions opacity must be performed in accordance with the procedures of EPA Method 9, of 40 CFR part 60, Appendix A-4, and while the affected source is operating under normal conditions. The duration of the EPA Method 9 test shall be thirty minutes.

(d) Visual determination of emissions opacity for welding Tier 2 or 3, graduated schedule. You must perform visual determination of emissions opacity in accordance with paragraph (c) of this section and according to the schedule in paragraphs (d)(1) through (5) of this section.

(1) Daily Method 9 testing for welding, Tier 2 or 3. Perform visual determination of emissions opacity once per day during each day that the process is in operation.

(2) Weekly Method 9 testing for welding, Tier 2 or 3. If the average of the six minute opacities recorded during any of the daily consecutive EPA Method 9 tests performed in accordance with paragraph (d)(1) of this section does not exceed 20 percent for 10 days of operation of the process, you may decrease the frequency of EPA Method 9 testing to once per five days of consecutive work day operation. If opacity greater than 20 percent is detected during any of these tests, you must resume testing every day of operation of the process according to the requirements of paragraph (d)(1) of this section.

(3) Monthly Method 9 testing for welding Tier 2 or 3. If the average of the six minute opacities recorded during any of the consecutive weekly EPA Method 9 tests performed in accordance with paragraph (d)(2) of this section does not exceed 20 percent for four consecutive weekly tests, you may decrease the frequency of EPA Method 9 testing to once per every 21 days of operation of the process. If visible emissions opacity greater than 20 percent is detected during any monthly test, you must resume testing every five days of operation of the process according to the requirements of paragraph (d)(2) of this section.

(4) Quarterly Method 9 testing for welding Tier 2 or 3. If the average of the six minute opacities recorded during any of the consecutive weekly EPA Method 9 tests performed in accordance with paragraph (d)(3) of this section does not exceed 20 percent for three consecutive monthly tests, you may decrease the frequency of EPA Method 9 testing to once per every 120 days of operation of the process. If visible emissions opacity greater than 20 percent is detected during any quarterly test, you must resume testing every 21 days (month) of operation of the process according to the requirements of paragraph (d)(3) of this section.

(5) Return to Method 22 testing for welding, Tier 2 or 3. If, after two consecutive months of testing, the average of the six minute opacities recorded during any of the monthly EPA Method 9 tests performed in accordance with paragraph (d)(3) of this section does not exceed 20 percent, you may resume EPA Method 22 testing as in paragraphs (b)(3) and (4) of this section. In lieu of this, you may elect to continue performing EPA Method 9 tests in accordance with paragraphs (d)(3) and (4) of this section.

SME Steel does perform welding and these requirements are included in the permit.

§ 63.11519

What are my notification, recordkeeping, and reporting requirements?

(a) What notifications must I submit?

(1) Initial Notification. If you are the owner or operator of an area source in one of the nine metal fabrication and finishing source categories, as defined in §63.11514 “Am I subject to this subpart?,” you must submit the Initial Notification required by §63.9(b) “General Provisions,” for a new affected source no later than 120 days after initial startup or November 20, 2008, whichever is later. For an existing affected source, you must submit the Initial Notification no later than July 25, 2011. Your Initial Notification must provide the information specified in paragraphs (a)(1)(i) through (iv) of this section.

(i) The name, address, phone number and e-mail address of the owner and operator;

(ii) The address (physical location) of the affected source;

(iii) An identification of the relevant standard (i.e., this subpart); and

(iv) A brief description of the type of operation. For example, a brief characterization of the types of products (e.g., aerospace components, sports equipment, etc.), the number and type of processes, and the number of workers usually employed.

(2) Notification of compliance status. If you are the owner or operator of an existing affected source, you must submit a notification of compliance status on or before November 22, 2011. If you are the owner or operator of a new affected source, you must submit a notification of compliance status within 120 days after initial startup, or by November 20, 2008, whichever is later. You are required to submit the information specified in paragraphs (a)(2)(i) through (iv) of this section with your notification of compliance status:

(i) Your company's name and address;

(ii) A statement by a responsible official with that official's name, title, phone number, e-mail address and signature, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart;

(iii) If you operate any spray painting affected sources, the information required by §63.11516(e)(3)(vi)(C), "Compliance demonstration," or §63.11516(e)(4)(ix)(C), "Compliance demonstration," as applicable; and

(iv) The date of the notification of compliance status.

(b) What reports must I prepare or submit?

(1) Annual certification and compliance reports. You must prepare and submit annual certification and compliance reports for each affected source according to the requirements of paragraphs (b)(2) through (7) of this section. The annual certification and compliance reporting requirements may be satisfied by reports required under other parts of the CAA, as specified in paragraph (b)(3) of this section.

(2) Dates. Unless the Administrator has approved or agreed to a different schedule for submission of reports under §63.10(a), "General Provisions," you must prepare and submit each annual certification and compliance report according to the dates specified in paragraphs (b)(2)(i) through (iii) of this section. Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

(i) The first annual certification and compliance report must cover the first annual reporting period which begins the day after the compliance date and ends on December 31.

(ii) Each subsequent annual certification and compliance report must cover the subsequent semiannual reporting period from January 1 through December 31.

(iii) Each annual certification and compliance report must be prepared and submitted no later than January 31 and kept in a readily-accessible location for inspector review. If an exceedance has occurred during the year, each annual certification and compliance report must be submitted along with the exceedance reports, and postmarked or delivered no later than January 31.

SME Steel is required to perform notifications for this subpart.

(3) Alternate dates. For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, "Title V."

(i) If the permitting authority has established dates for submitting annual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), "Title V," you may prepare or submit, if required, the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the date specified in paragraph (b)(2)(iii) of this section.

(ii) If an affected source prepares or submits an annual certification and compliance report pursuant to this section along with, or as part of, the monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), "Title V," and the compliance report includes all required information concerning exceedances of any limitation in this subpart, its submission will be deemed to satisfy any obligation to report the same exceedances in the annual monitoring report. However, submission of an annual certification and compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority.

This facility is not a Title V source. Therefore, this Subsection of Subpart XXXXXX does not apply and no further discussion is required.

(4) General requirements. The annual certification and compliance report must contain the information specified in paragraphs (b)(4)(i) through (iii) of this section, and the information specified in paragraphs (b)(5) through (7) of this section that is applicable to each affected source.

(i) Company name and address;

(ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report; and

(iii) Date of report and beginning and ending dates of the reporting period. The reporting period is the 12-month period ending on December 31. Note that the information reported for the 12 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

(5) Visual determination of fugitive emissions requirements. The annual certification and compliance report must contain the information specified in paragraphs (b)(5)(i) through (iii) of this section for each affected source which performs visual determination of fugitive emissions in accordance with §63.11517(a), “Monitoring requirements.”

(i) The date of every visual determination of fugitive emissions which resulted in detection of visible emissions;

(ii) A description of the corrective actions taken subsequent to the test; and

(iii) The date and results of the follow-up visual determination of fugitive emissions performed after the corrective actions.

(6) Visual determination of emissions opacity requirements. The annual certification and compliance report must contain the information specified in paragraphs (b)(6)(i) through (iii) of this section for each affected source which performs visual determination of emissions opacity in accordance with §63.11517(c), “Monitoring requirements.”

(i) The date of every visual determination of emissions opacity;

(ii) The average of the six-minute opacities measured by the test; and

(iii) A description of any corrective action taken subsequent to the test.

(7) [Reserved]

(8) Exceedences of 20 percent opacity for welding affected sources. As required by §63.11516(f)(7)(i), “Requirements for opacities exceeding 20 percent,” you must prepare an exceedence report whenever the average of the six-minute average opacities recorded during a visual determination of emissions opacity exceeds 20 percent. This report must be submitted along with your annual certification and compliance report according to the requirements in paragraph (b)(1) of this section, and must contain the information in paragraphs (b)(8)(iii)(A) and (B) of this section.

(A) The date on which the exceedence occurred; and

(B) The average of the six-minute average opacities recorded during the visual determination of emissions opacity.

SME Steel is required to perform additional notifications for this subpart.

(9) Site-specific Welding Emissions Management Plan reporting. The permittee must submit a copy of the records of daily visual determinations of emissions recorded in accordance with §63.11516(f)(7)(iv), “Tier 3 requirements for opacities exceeding 20 percent,” and a copy of your Site-Specific Welding Emissions Management Plan and any subsequent revisions to the plan pursuant to §63.11516(f)(8), “Site-specific Welding Emission Management Plan,” along with your annual certification and compliance report, according to the requirements in paragraph (b)(1) of this section.

SME Steel is required to perform additional notifications for welding emissions management. These requirements are included in the permit.

(c) *What records must I keep?*

The permittee must collect and keep records of the data and information specified in paragraphs (c)(1) through (13) of this section, according to the requirements in paragraph (c)(14) of this section.

(1) General compliance and applicability records. Maintain information specified in paragraphs (c)(1)(i) through (ii) of this section for each affected source.

(i) Each notification and report that you submitted to comply with this subpart, and the documentation supporting each notification and report.

(ii) Records of the applicability determinations as in §63.11514(b)(1) through (5), “Am I subject to this subpart,” listing equipment included in its affected source, as well as any changes to that and on what date they occurred, must be maintained for 5 years and be made available for inspector review at any time.

(2) Visual determination of fugitive emissions records. Maintain a record of the information specified in paragraphs (c)(2)(i) through (iii) of this section for each affected source which performs visual determination of fugitive emissions in accordance with §63.11517(a), “Monitoring requirements.”

(i) The date and results of every visual determination of fugitive emissions;

(ii) A description of any corrective action taken subsequent to the test; and

(iii) The date and results of any follow-up visual determination of fugitive emissions performed after the corrective actions.

(3) Visual determination of emissions opacity records. Maintain a record of the information specified in paragraphs (c)(3)(i) through (iii) of this section for each affected source which performs visual determination of emissions opacity in accordance with §63.11517(c), “Monitoring requirements.”

(i) The date of every visual determination of emissions opacity; and

(ii) The average of the six-minute opacities measured by the test; and

(iii) A description of any corrective action taken subsequent to the test.

(4) Maintain a record of the manufacturer's specifications for the control devices used to comply with §63.11516, “What are my standards and management practices?”

(5) Spray paint booth filter records. Maintain a record of the filter efficiency demonstrations and spray paint booth filter maintenance activities, performed in accordance with §63.11516(d)(1)(ii) and (iii), “Requirements for spray painting objects in spray booths or spray rooms.”

(6) Waterspray booth or water curtain efficiency tests. Maintain a record of the water curtain efficiency demonstrations performed in accordance with §63.11516(d)(1)(ii), “Requirements for spray painting objects in spray booths or spray rooms.”

(7) HVLP or other high transfer efficiency spray delivery system documentation records. Maintain documentation of HVLP or other high transfer efficiency spray paint delivery systems, in compliance with §63.11516(d)(3), “Requirements for spray painting of all objects.” This documentation must include the manufacturer's specifications for the equipment and any manufacturer's operation instructions. If you have obtained written approval for an alternative spray application system in accordance with §63.11516(d)(2), “Spray painting of all objects,” you must maintain a record of that approval along with documentation of the demonstration of equivalency.

(8) HVLP or other high transfer efficiency spray delivery system employee training documentation records. Maintain certification that each worker performing spray painting operations has completed the training specified in §63.11516(d)(6), “Requirements for spray painting of all objects,” with the date the initial training and the most recent refresher training was completed.

SME Steel does not perform spray painting with materials that contain MFHAP or that have the potential to emit MFHAP. Therefore, Sections (5) through (8) of Subpart XXXXXX do not apply.

(11) Visual determination of emissions opacity performed during the preparation (or revision) of the Site-Specific Welding Emissions Management Plan. You must maintain a record of each visual determination of emissions opacity performed during the preparation (or revision) of a Site-Specific Welding Emissions Management Plan, in accordance with §63.11516(f)(7)(iii), “Requirements for opacities exceeding 20 percent.”

(12) Site-Specific Welding Emissions Management Plan. If you have been required to prepare a plan in accordance with §63.11516(f)(7)(iii), “Site-Specific Welding Emissions Management Plan,” you must maintain a copy of your current Site-Specific Welding Emissions Management Plan in your records and it must be readily available for inspector review.

(13) *Manufacturer's instructions.* If you comply with this subpart by operating any equipment according to manufacturer's instruction, you must keep these instructions readily available for inspector review.

(14) *Welding Rod usage.* If you operate a new or existing welding affected source which is not required to comply with the requirements of §63.11516(f)(3) through (8) because it uses less than 2,000 pounds per year of welding rod (on a rolling 12-month basis), you must maintain records demonstrating your welding rod usage on a rolling 12-month basis.

(15) Your records must be maintained according to the requirements in paragraphs (c)(14)(i) through (iii) of this section.

(i) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1), "General Provisions." Where appropriate, the records may be maintained as electronic spreadsheets or as a database.

(ii) As specified in §63.10(b)(1), "General Provisions," you must keep each record for 5 years following the date of each occurrence, measurement, corrective action, report, or record.

(iii) You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, corrective action, report, or record according to §63.10(b)(1), "General Provisions." You may keep the records off-site for the remaining 3 years.

SME Steel is required to perform additional notifications for welding operations. These requirements are included in the permit.

§ 63.11521 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by EPA or a delegated authority such as your state, local, or tribal agency. If the EPA Administrator has delegated authority to your state, local, or tribal agency, then that agency, in addition to EPA, has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your state, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a state, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the state, local, or tribal agency.

(c) The authorities that cannot be delegated to state, local, or tribal agencies are specified in paragraphs (c)(1) through (5) of this section.

(1) Approval of an alternative non-opacity emissions standard under §63.6(g), of the General Provisions of this part.

(2) Approval of an alternative opacity emissions standard under §63.6(h)(9), of the General Provisions of this part.

(3) Approval of a major change to test methods under §63.7(e)(2)(ii) and (f), of the General Provisions of this part. A "major change to test method" is defined in §63.90.

(4) Approval of a major change to monitoring under §63.8(f), of the General Provisions of this part. A "major change to monitoring" under is defined in §63.90.

(5) Approval of a major change to recordkeeping and reporting under §63.10(f), of the General Provisions of this part. A "major change to recordkeeping/reporting" is defined in §63.90.

This Section deals with implementation of the Subpart. Therefore, this Section of Subpart XXXXXX does not require permit requirements and no further discussion is required.

§ 63.11522 What definitions apply to this subpart?

The definitions of Subpart XXXXXX apply to this facility and no further discussion is required.

§ 63.11523 What General Provisions apply to this subpart?

Table 1 Table 2 to Subpart XXXXXX of Part 63—Applicability of General Provisions to Metal Fabrication or Finishing Area Sources

| Citation | Subject |
|---|---|
| 63.1 ¹ | Applicability. |
| 63.2 | Definitions. |
| 63.3 | Units and abbreviations. |
| 63.4 | Prohibited activities. |
| 63.5 | Construction/reconstruction. |
| 63.6(a), (b)(1)-(b)(5), (c)(1), (c)(2), (c)(5), (g), (i), (j) | Compliance with standards and maintenance requirements. |
| 63.9(a)-(d) | Notification requirements. |
| 63.10(a), (b) except for (b)(2), (d)(1), (d)(4) | State authority and delegations. |
| 63.12 | State authority and delegations. |
| 63.13 | Addresses of State air pollution control agencies and EPA regional offices. |
| 63.14 | Incorporation by reference. |
| 63.15 | Availability of information and confidentiality. |
| 63.16 | Performance track provisions |

¹§63.11514(g), “Am I subject to this subpart?” exempts affected sources from the obligation to obtain title V operating permits.

SME Steel is subject to the general provisions of this subpart.

Permit Conditions Review

This section describes the permit conditions for this initial permit.

Permit Condition 1.1

Describes the purpose of the permit which is for the addition of abrasive blasting and painting operations. Also, the permit includes the applicable requirements of 40 CFR 63 Subpart XXXXXX for both the existing and new operations.

Permit Condition 2.1

Provides a process description for abrasive blasting and painting operations.

Permit Condition 2.3

This permit condition limits daily TAP emissions rates to below the screening emission level multiplied by 24 for TAPs listed in Section 585 and for the TAPs listed in Section 586 of the rules, or below the emission rate that would cause an ambient impact to exceed the acceptable ambient concentration for that TAP. Daily emissions of equal to or less than the EL times 24 assures that maximum 24-hour average emissions rates are below the EL for TAPs listed in Section 585 and 586 of the Rules. If daily emissions exceed the EL times 24 then the facility shall model emission rates to determine ambient impacts. Under this permit condition TAP ambient impacts are limited from the facility to be less than the acceptable ambient concentration. The permit does allow the use of new paints and solvents provided those changes result in emissions that comply with the above described permit conditions.

Requiring modeling to assure compliance with acceptable ambient concentrations is consistent with the toxic air pollutant exemption criteria listed in Section 223.02.b⁵ of the Rules and consistent with the precedent set by the Charmac Permit to Construct (P-2009.0095) that was issued on January 6, 2010, the Guerdon Enterprises Permit to Construct (P-2014.0018) that was issued September 2, 2014 and the Koontz Wagner Permit to Construct (P-2014.0026) that was issued January 22, 2016.

Permit Condition 2.4

Hazardous air pollutant emissions are limited to less than major facility thresholds.

Permit Condition 2.5

This permit condition includes the opacity standard of IDAPA 58.01.01.625.

⁵ The toxic air pollutant exemption criteria are not applicable to this permit condition but it is relevant in the sense that this permit condition requires similar reporting requirements when air pollution dispersion modeling is conducted.

Permit Condition 2.6

Limits the abrasive blasting media use to the annual usage rate was used in the emission calculations to show that the emission increase from the project (abrasive blasting and painting operations) are below the below regulatory concern (BRC) modeling threshold.

Permit Condition 2.7

Dry abrasive blasting may only occur on objects greater than 8 feet in any dimension. The reason for this limitation is that in accordance with 40 CFR 63 Subpart XXXXXX dry abrasive blasting of objects less than 8 feet must occur within an unventilated enclosure or enclosure equipped with a filtration system and SME Steel does not have these types of enclosures.

Permit Condition 2.8

Painting operations shall occur in a totally enclosed room that has a ventilation system that controls all PM₁₀ emissions from painting operations with a filter system that is guaranteed by the manufacture to control 90% of PM₁₀ emissions. Floor to ceiling curtains are acceptable as part of the enclosure. This in conjunction with the painting usage limit serves to limit emissions from the painting operation to the emission calculations that show that the emission increase from the project (abrasive blasting and painting operations) are below the below regulatory concern (BRC) modeling threshold.

Permit Condition 2.9

The permittee shall not use more than 4,944 gallons of paint in any consecutive 12-month period. This in conjunction with the paint enclosure operating requirement serves to limit emissions from the painting operation to the emission calculations that show that the emission increase from the project (abrasive blasting and painting operations) are below the below regulatory concern (BRC) modeling threshold.

Permit Condition 2.10

The permittee shall not use paint that contains cadmium, chromium, lead, manganese, or nickel. This permit condition is to prevent the facility from being subject to the painting limitations of 40 CFR 63 Subpart XXXXXX.

Permit Condition 2.11

The permittee shall only use airless spray guns for painting operations within the painting enclosure. This requirement is to assure that the paint gun transfer efficiency is consistent with that used in the calculations to estimate emissions from the painting operation and serves to assure emissions from the project are below the BRC

Permit Condition 2.12

This permit condition requires keeping records of the daily usage of HAP and TAP containing materials that emit air pollutions. This information will be used to estimate emissions as required by this permit.

Permit Condition 2.13

This permit condition requires the permittee to calculate and record TAP emissions each day. If the daily emissions (pounds per calendar day) exceed the TAP screening emissions multiplied by 24 then the source must model to determine ambient impacts. In accordance with the general provisions all emissions calculations shall remain on-site. If modeling is conducted a report must be submitted to DEQ by May 1 each year as required by this permit.

Permit Condition 2.14

Using the material usage records required to be kept the permittee shall calculate HAP emission rates. Each month the permittee shall determine the HAP emissions that occurred during the previous 12 consecutive months. The permittee shall determine the emissions of each individual HAP and the total of all HAP emissions combined.

Permit Condition 2.15

Each year the permittee shall submit a report by May 1st on all TAP modeling analyses that have been conducted during the previous 12 month period. The report shall include all modeling files and emissions calculations.

Permit Condition 2.16

This permit condition serves to remind the source that it has an obligation to submit an excess emissions report should modeling show that an acceptable ambient concentration for any TAP was violated.

Permit Section 3

The sole purpose of Section 3 of the permit is to incorporate the applicable provisions of 40 CFR 63 Subpart XXXXXX Nine Metal Fabrication and Finishing Source Categories. A regulatory breakdown of these requirements is provided in the MACT Applicability section of this Statement of Basis.

DEQ is not delegated this Subpart.

Initial Permit Condition 4.1

The duty to comply general compliance provision requires that the permittee comply with all of the permit terms and conditions pursuant to Idaho Code §39-101.

Initial Permit Condition 4.2

The maintenance and operation general compliance provision requires that the permittee maintain and operate all treatment and control facilities at the facility in accordance with IDAPA 58.01.01.211.

Initial Permit Condition 4.3

The obligation to comply general compliance provision specifies that no permit condition is intended to relieve or exempt the permittee from compliance with applicable state and federal requirements, in accordance with IDAPA 58.01.01.212.01.

Initial Permit Condition 4.4

The inspection and entry provision requires that the permittee allow DEQ inspection and entry pursuant to Idaho Code §39-108.

Initial Permit Condition 4.5

The permit expiration construction and operation provision specifies that the permit expires if construction has not begun within two years of permit issuance or if construction has been suspended for a year in accordance with IDAPA 58.01.01.211.02.

Initial Permit Condition 4.6

The notification of construction and operation provision requires that the permittee notify DEQ of the dates of construction and operation, in accordance with IDAPA 58.01.01.211.03.

Initial Permit Condition 4.7

The performance testing notification of intent provision requires that the permittee notify DEQ at least 15 days prior to any performance test to provide DEQ the option to have an observer present, in accordance with IDAPA 58.01.01.157.03.

Initial Permit Condition 4.8

The performance test protocol provision requires that any performance testing be conducted in accordance with the procedures of IDAPA 58.01.01.157, and encourages the permittee to submit a protocol to DEQ for approval prior to testing.

Initial Permit Condition 4.9

The performance test report provision requires that the permittee report any performance test results to DEQ within 30 days of completion, in accordance with IDAPA 58.01.01.157.04-05.

Initial Permit Condition 4.10

The monitoring and recordkeeping provision requires that the permittee maintain sufficient records to ensure compliance with permit conditions, in accordance with IDAPA 58.01.01.211.

Initial Permit Condition 4.11

The excess emissions provision requires that the permittee follow the procedures required for excess emissions events, in accordance with IDAPA 58.01.01.130-136.

Initial Permit Condition 4.12

The certification provision requires that a responsible official certify all documents submitted to DEQ, in accordance with IDAPA 58.01.01.123.

Initial Permit Condition 4.13

The false statement provision requires that no person make false statements, representations, or certifications, in accordance with IDAPA 58.01.01.125.

Initial Permit Condition 4.14

The tampering provision requires that no person render inaccurate any required monitoring device or method, in accordance with IDAPA 58.01.01.126.

Initial Permit Condition 4.15

The transferability provision specifies that this permit to construct is transferable, in accordance with the procedures of IDAPA 58.01.01.209.06.

Initial Permit Condition 4.16

The severability provision specifies that permit conditions are severable, in accordance with IDAPA 58.01.01.211.

PUBLIC REVIEW

Public Comment Opportunity

An opportunity for public comment period on the application was provided in accordance with IDAPA 58.01.01.209.01.c or IDAPA 58.01.01.404.01.c. During this time, there were no comments on the application and there was not a request for a public comment period on DEQ's proposed action. Refer to the chronology for public comment opportunity dates.

APPENDIX A – EMISSIONS INVENTORIES

**Appendix A.
Ambient Air Impact Assessment – Criteria Pollutants**

Table 1 provides emission estimates for criteria pollutants for the new operations proposed for the SME Pocatello facility. Calculations of these estimates and the assumptions made in performing the calculations are described below.

Table 1 Proposed Emissions – SME Facility Pocatello Idaho

| Emissions Unit | Stack or Emissions Point ID ^a | PM ₁₀ | PM _{2.5} | | SO ₂ | | NO _x | | CO | | Lead | |
|---------------------------|--|------------------|-------------------|-------------------|-----------------|-----------------|-----------------|-------------------|------------|-----------------|--------------------|------------------|
| | | lb/hr 24-hr Avg. | lb/hr 24-hr Avg. | lb/hr Annual Avg. | lb/hr Max. | lb/hr 3-hr Avg. | lb/hr Max. | lb/hr Annual Avg. | lb/hr Max. | lb/hr 8-hr Avg. | lb/hr monthly Avg. | lb/hr 1/4ly Avg. |
| No Point Sources | | | | | | | | | | | | |
| Fugitive Sources | | | | | | | | | | | | |
| Outdoor Abrasive Blasting | AB-01 | 0.65 | 0.065 | 0.046 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Painting Operations | SP-01 | 0.004 | 0.004 | 0.003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Emissions | | 0.65 | 0.069 | 0.049 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

a) Stack or Emissions Point ID must match the ID used in the air dispersion model.

Abrasive Blast Operation Description/Assumptions

The proposed abrasive blast operations will be located in an outdoor location along the south east corner of the SME facility. The blast booth will be contained with walls on three sides (one wall being the south wall of the facility). The blast booth will be not covered with a roof section as stated in the previous submittal. The building is approximately 250 feet from the south property line. There are outfield sections of two baseball fields adjacent to the south property line. Access to the SME property will be controlled with a gate during blasting operations so it is unlikely that any public receptors would be within 450 feet of the blasting operations.

The emission estimates for the abrasive blast criteria pollutants in Table 1 are based on the following assumptions. One Electrically-powered abrasive blast unit with a capacity of delivering 150 pounds of abrasive blast per hour will be operated for 8-hours a day for 190 days per year or a total of 1520 hours per year. PM₁₀ and PM_{2.5} emission estimates from abrasive blast operations were obtained from AP-42. AP-42 indicates that are 13 pounds of PM₁₀ and 1.3 pounds of PM_{2.5} are emitted for each 1000 pounds of abrasive blast. Calculation of hourly and annual emissions are summarized below.

Hourly PM₁₀ Emissions from Abrasive Blasting

$$(150 \text{ lbs blast/hour}) \times (13 \text{ lbs of PM}_{10}/1000 \text{ lbs of blast}) \times (8 \text{ hours}/24 \text{ hours}) = 0.65 \text{ lbs/hr PM}_{10} \text{ (24-hr ave.)}$$

$$(150 \text{ lbs blast/hour}) \times (13 \text{ lbs of PM}_{2.5}/1000 \text{ lbs of blast}) \times (1520 \text{ hours}/8760 \text{ hours}) = 0.34 \text{ lbs/hr PM}_{2.5} \text{ (annual average)}$$

Annual PM₁₀ Emissions from Abrasive Blasting

$$(150 \text{ lbs blast/hour}) \times (13 \text{ lbs of PM}_{10}/1000 \text{ lbs of blast}) \times (1520 \text{ hours/year}) = 2964 \text{ lbs PM}_{10}/\text{year}$$

$$= 1.48 \text{ tons PM}_{10}/\text{year}$$

Hourly PM_{2.5} Emissions from Abrasive Blasting

$$(150 \text{ lbs blast/hour}) \times (1.3 \text{ lbs of PM}_{2.5}/1000 \text{ lbs of blast}) \times (8 \text{ hours}/24 \text{ hours}) = 0.065 \text{ lbs/hr PM}_{2.5} \text{ (24-hr ave.)}$$

$$(150 \text{ lbs blast/hour}) \times (1.3 \text{ lbs of PM}_{2.5}/1000 \text{ lbs of blast}) \times (1520 \text{ hours}/8760 \text{ hours}) = 0.034 \text{ lbs/hr PM}_{2.5} \\ \text{(annual average)}$$

Annual PM_{2.5} Emissions from Abrasive Blasting

$$(150 \text{ lbs blast/hour}) \times (1.3 \text{ lbs of PM}_{2.5}/1000 \text{ lbs of blast}) \times (1520 \text{ hours/year}) = 296 \text{ lbs PM}_{2.5}/\text{year} \\ = 0.15 \text{ tons PM}_{2.5}/\text{year}$$

Since the paints will be applied with electric-powered spray guns, no fuel will be combusted and subsequently no SO₂, NO_x, CO or lead emissions are expected.

Painting Operation Description/Assumptions

The criteria pollutant emission estimates for the painting operations in Table 1 are based on the following assumptions. Paint usage estimates were obtained from painting records at the West Jordan, Utah facility for the 2014 calendar year. 9887 gallons of coatings were applied to structural steel components in at the West Valley facility in 2014. It is assumed that 50% of this amount of paint (4944 gallons) will be used annually at the Pocatello facility. The average solids content of the paints applied at West Jordan (obtained from MSDSs) was estimated at 10 pounds of solids per gallon of paint. The amount of solids applied at the West Valley facility thus becomes (4944 gallons) x (10 lbs/gallon) = 49,440 lbs.

RMEC referred to the following document to obtain estimates of particulate emissions from the painting operations: *Painting Basics and Emission Calculations for TCEQ Air Quality Permit Applications, Texas Commission on Environmental Quality, October 2006*. A copy of this reference has been attached as Appendix I. Since large flat surfaces are being painted with airless spray guns, painting transfer efficiency is assumed to be 90%. All painting will be performed inside of the SME facility in open bays in the southeast corner of the building. Based on the 90% transfer efficiency, approximately 10% of the particulate overspray (4944 pounds of solids) will be released into the building.

SME uses airless sprayers for the paint application and this type of spray equipment produces large droplets, typically greater than 30 microns in diameter. Particles of this size do not stay suspended in the air stream for a significant amount of time and will fall to the floor or impact the walls of a paint booth. The referenced document indicated that 90% of the overspray droplets of this particle size will fall out of the air stream.

Therefore, approximately 10% of the particulate overspray (494 pounds) released into the building will remain airborne. SME will install a floor-level exhaust system along the east wall on the south end of the building to exhaust the heavier than air volatile compounds that will be emitted from the painting operations. This exhaust system will be equipped with high efficiency particulate filters. There is currently only one other HVAC exhaust vent in the building. It is located at ceiling level, in the center of the building and not above the painting area. While some minor levels of particulate and VOC emissions may make their way to the outdoor air through the HVAC exhaust and through open doors and windows, the floor level exhaust in the paint area is expected to capture and remove the vast majority of particulate and VOCs generated in the painting area. To minimize the release of fugitive emissions through open doors and windows, SME will implement a procedure to keep all doors and windows in the facility closed during painting operations.

Assuming that the paint area exhaust system with the high efficiency particulate filters can achieve a removal efficiency of at least 90%, approximately 50 pounds of the 494 pounds of particulate suspended in the building air will be emitted to the outdoor air.

Since the particle size distribution of the particulates released to the outdoor air is unknown, it was further assumed that 50% of total particulate overspray that does exit the building (25 pounds) will be of the PM₁₀ size range and 50% (25 pounds) will be in the PM_{2.5} size range and that these emissions will occur uniformly over the 2080 working hours of the year.

Hourly PM₁₀ Emissions from Painting

(25 lbs of PM₁₀/2080 hours) x (8 hours/24 hours) = 0.004 lbs. PM₁₀/hour – 24 hour average

(25 lbs of PM₁₀/8760) = 0.003 lbs. PM₁₀/hour – Annual Average

Annual PM₁₀ Emissions from Painting

25 lbs./year = 0.01 tons/year

Hourly PM_{2.5} Emissions from Painting

(25 lbs of PM_{2.5}/2080 hours) x (8 hours/24 hours) = 0.004 lbs. PM_{2.5}/hour – 24 hour average

(25 lbs of PM_{2.5}/8760 hours) = 0.003 lbs. PM_{2.5}/hour – Annual Average

Annual PM_{2.5} Emissions from Painting

25 lbs/year = 0.01 tons/year

Since the paints will be applied with electric-powered spray guns, no fuel will be combusted and subsequently no SO₂, NO_x, CO or lead emissions are expected.

The emission estimates from the abrasive blast and painting operations calculated above were added to one another and compared to various screening criteria in Tables 2.0 and 3.0. Level I and Level II Threshold levels were obtained from the State of Idaho Guideline for Performing Air Quality Impact Analyses. The Below Regulatory Concern (BRC) Levels are 10 % of the Significant Impact Levels as defined in the Idaho Air Rules Section 006.

Table 2.0. Comparison of Hourly Particulate Emission Rates (Blasting + Painting) to Screening Criteria

| Criteria Pollutant | Emissions - lb/hour (24-hour average) | Emissions - lb/hour (Annual average) | Level I Threshold (lb/hour) | Level II Threshold (lb/hour) | BRC Level ¹ (lb/hr) |
|--------------------|---------------------------------------|--------------------------------------|-----------------------------|------------------------------|--------------------------------|
| PM ₁₀ | 0.65 | 0.37 | 0.22 | 2.6 | 0.34 |
| PM _{2.5} | 0.069 | 0.049 | 0.054 | 0.63 | 0.23 |

¹ Below Regulatory Concern level is 10% of significant impact level as defined in Idaho Air Rules Section 006

Table 3.0. Comparison of Annual Particulate Emission Rates to Screening Criteria

| Criteria Pollutant | Emissions tons/year | Level I Threshold (ton/year) | Level II Threshold (tons/year) | BRC Level ² (ton/year) |
|--------------------|---------------------|------------------------------|--------------------------------|-----------------------------------|
| PM ₁₀ | 1.5 | - | - | 1.5 |
| PM _{2.5} | 0.20 | 0.35 | 4.1 | 1.0 |

² Below Regulatory Concern level is 10% of significant impact level as defined in Idaho Air Rules Section 006

PM₁₀ Emissions

Proposed PM₁₀ hourly emission rates from the abrasive blast and painting operations are estimated to be 0.65 lb/hour based on a 24-hour average and 0.37 lb/hour based on an annual average. The Level 1 Modeling Threshold for hourly emissions is 0.22 lb/hour, the Level II Modeling Threshold is 2.6 lb/hour, and the Below Regulatory Concern (BRC) level is 0.34 lb/hr. Therefore, the estimated PM₁₀ hourly emission rates (both on a 24-hor and an annual average) exceed the Level I Threshold but are well within the Level II Threshold. The PM₁₀ emission rate based on a 24-hour average exceeded the BRC Level, but the PM₁₀ emission rate based on an annual average was right at the BRC Level.

Proposed annual PM₁₀ emission levels in tons/year are estimated at 1.5 tons/year. There are no Level I or Level II Thresholds for PM₁₀ based on an annual emission level. However, the proposed PM₁₀ annual emissions are right at the BRC level of 1.5 tons/year.

PM_{2.5} Emissions

Proposed new PM_{2.5} emission rates hourly emission rates from the abrasive blast and painting operations are estimated to be 0.069 lb/hour based on a 24-hour average and 0.0.049 lb/hour based on an annual average. The Level I threshold for emissions is 0.0.054 lb/hour, the Level II Threshold is 0.63 lb/hour and the Below Regulatory Concern (BRC) level is 0.23 lb/hr. The estimated PM_{2.5} hourly emission rates (24-hour average) exceeded the Level I Threshold but the PM_{2.5} hourly emission rates (annual average) were within the Level I Threshold. The PM_{2.5} hourly emission rates are well within the Level II Threshold and the BRC Level.

Proposed annual PM_{2.5} emission in tons/year are estimated at 0.20 tons/year. This estimated emission level is within the Level I Threshold of 0.35 tons/year, the Level II Threshold of 4.1 tons/year and the BRC Level of 1.0 tons/year.

As previously stated, no SO₂, NO_x, CO or lead emissions are expected from the blasting and painting operations. Based on the estimated particulate emission rates, and the distance of the particulate emissions from the nearest receptor (>250 feet), RMEC believes the abrasive blasting and painting operations proposed for the SME facility will have a minimal impact on air quality from criteria air pollutants.

Appendix B. Particulate and Toxic Air Pollutant Emissions from Abrasive Blast Operations

The PM₁₀, PM_{2.5} emission factors cited in the calculations below were obtained from AP-42 Table 13.2.6-1. The abrasive blast unit at the West Jordan facility can deliver up to 150 pounds of blast per hour. The maximum level of blasting that would ever be performed at the facility would be 8 hours of blasting per day, for 190 days per year or 1520 hours of blasting per year.

Maximum PM₁₀ PTE Estimates from Abrasive Blasting

(150 pounds of abrasive blast/hour) x (13 pounds PM₁₀/1000 pounds of abrasive blast) =
1.95 pounds of PM₁₀/hour for an 8-hour average or 0.65 pounds of PM₁₀/hour for a 24-hour average

(1520 hours/year) x (1.95 pounds PM₁₀/hour) = **2964 pounds of PM₁₀/year (1.48 tons PM₁₀/year)**

Table 2 in the State of Idaho Guideline for Performing Air Quality Impact Analyses lists the Level I Threshold for PM₁₀ as 0.22 pounds per hour and the Level II Threshold as 2.6 pounds per hour. The maximum expected hourly PM₁₀ emission rate at SME is 1.95 pounds per hour (8-hour average) and 0.65 pounds per hour (24 hour average) and falls in between these two thresholds. No annual PM₁₀ emission rate is listed in Table 2.

Maximum PM_{2.5} PTE Estimates from Abrasive Blasting

(150 pounds of abrasive blast/hour) x (1.3 pounds of PM_{2.5}/1000 pounds of abrasive blast) =
0.195 pounds of PM_{2.5}/hour for an 8-hour average or 0.065 pounds of PM_{2.5}/hour for a 24-hour average

(1520 hours/year) x (.195 pounds/hour) = **296 pounds of PM_{2.5}/year (0.15 tons PM_{2.5}/year)**

Table 2 in the State of Idaho Guideline for Performing Air Quality Impact Analyses lists the Level I for PM_{2.5} as 0.054 pounds per hour and 0.35 tons per year. Table 2 also lists the Level II Threshold as 0.63 pounds per hour and 4.1 tons per year. The maximum expected hourly PM_{2.5} emission rate at SME is 0.195 pounds per hour (8-hour average) and 0.065 pounds per hour (24 hour average) and falls in between these two thresholds. Annual PM_{2.5} emissions are within both the Level I and Level II Thresholds.

Maximum Toxic Air Pollutant (TAP) Emission Estimates from Abrasive Blasting

The metal parts that will be blasted at SME will not be painted so only rust and scale will be removed during the blasting. However, some of the metal alloys may contain trace levels of other TAPs including manganese and chromium. In addition, the copper slag abrasive blast also contains trace levels of TAPs (aluminum oxide and crystalline silica). The level of emissions for these TAPS were calculated using the total particulate (PM) emission factor at a 5 mph wind speed from AP-42 Table 13.2.6-1 (27 pounds of PM per 1000 pounds of abrasive blast) and then applying the average percentage of manganese and chromium in the steel components or the average level of aluminum oxide or crystalline silica in the copper slag (obtained from MSDSs)

to this PM emission level. This over estimates the level of TAP emissions since this calculation assumes 100 % of the PM emissions are form the base metal being blasted or the copper slag, respectively.

Chromium form Base Metal

(150 pounds of abrasive blast/hour) x (27 pounds PM/1000 pounds of blast) x (0.12% Chromium)

=

0.005 pounds of Chromium/hour

TAP EL = 0.033 pounds of Chromium/hour

Manganese from Base Metal

(150 pounds of abrasive blast/hour) x (27 pounds PM/1000 pounds of blast) x (1.11%

Manganese) =

0.045 pounds of Manganese/hour

TAP EL = 0.333 pounds of Manganese/hour

Aluminum Oxide form Abrasive Blast

(150 pounds of abrasive blast/hour) x (27 pounds PM/1000 pounds of blast) x (10% Aluminum Oxide) =

0.405 pounds of Aluminum Oxide/hour

TAP EL = 0.667 pounds of Aluminum Oxide/hour

Crystalline Silica form Abrasive Blast

(150 lbs of abrasive blast/hour) x (27 lbs PM/1000 lbs of blast) x (<0.1% Crystalline Silica) =

<0.00405 pounds of Crystalline Silica/hour

TAP EL = 0.0067 pounds of Crystalline Silica/hour

All TAP expected emissions are below the respective ELs cited in the Idaho Air Quality Rules.

APPENDIX B – PROCESSING FEE

PTC Fee Calculation

Instructions:

Fill in the following information and answer the following questions with a Y or N. Enter the emissions increases and decreases for each pollutant in the table.

Company: SME Steel
Address: 669 West Quinn Road Bld. 28
City: Pocatello
State: Idaho
Zip Code: 83202
Facility Contact: Tim Salak
Title: Director
AIRS No.: 005-00043

- N Does this facility qualify for a general permit (i.e. concrete batch plant, hot-mix asphalt plant)? Y/N
- Y Did this permit require engineering analysis? Y/N
- N Is this a PSD permit Y/N (IDAPA 58.01.01.205.04)

| Emissions Inventory | | | |
|----------------------------|----------------------------------|-----------------------------------|--------------------------------|
| Pollutant | Annual Emissions Increase (T/yr) | Annual Emissions Reduction (T/yr) | Annual Emissions Change (T/yr) |
| NO _x | 0.0 | 0 | 0.0 |
| SO ₂ | 0.0 | 0 | 0.0 |
| CO | 0.0 | 0 | 0.0 |
| PM10 | 1.4 | 0 | 1.4 |
| VOC | 25.0 | 0 | 25.0 |
| TAPS/HAPS | 24.0 | 0 | 24.0 |
| Total: | 0.0 | 0 | 50.4 |
| Fee Due | \$ 5,000.00 | | |

Comments: TAPS and haps are less than 24 tons, it was not necessary to refine the estimate. Fees are not affected at the worst case assumption of 24 tons per year.

Appendix C

Isocyanate Emission Supporting Information

Coating Environmental Data - As Supplied

SERIES 394 (F394-0394)

| | | | |
|-----------------------------|-------|--------|--|
| Coating Density = | 21.20 | | |
| Specific Gravity = | 2.54 | | |
| | % wt. | % vol. | |
| % Total Volatiles = | 13.32 | 38.93 | |
| % Exempt = | 0.47 | 1.52 | |
| % Non-volatile (% solids) = | 86.68 | 61.07 | |
| % VOC = | 12.84 | 37.41 | |
| % HAP = | 2.75 | 6.09 | |
| % Water = | 0.00 | 0.00 | |

| | |
|-------------------------|--------|
| VOC (lbs/gallon) = | 2.76 |
| VOC (grams/liter) = | 331.26 |
| VOC lbs/gal of solids = | 4.62 |

| | |
|----------------------------|--------|
| HAP's (lbs/gallon) = | 0.68 |
| HAP's lbs/gal of solids = | 0.95 |
| HAP's Kg/Liter of solids = | 0.1142 |

| HAPs Constituent(s): | | | % wt | % vol |
|----------------------|------|---------|------|-------|
| MONOCHLOROBENZENE | 0.00 | lbs/gal | 0.00 | 0.00 |
| CHROMIC (III) OXIDE | 0.03 | lbs/gal | 0.13 | 0.06 |
| MDI REACTIVE MONOMER | 0.44 | lbs/gal | 2.07 | 4.42 |
| MDI VOLATILE MONOMER | 0.00 | lbs/gal | 0.02 | 0.04 |
| ETHYLBENZENE | 0.02 | lbs/gal | 0.08 | 0.24 |
| XYLENE | 0.06 | lbs/gal | 0.26 | 0.76 |
| CUMENE | 0.04 | lbs/gal | 0.19 | 0.58 |

HAP's TOTAL = 0.58 lbs/gal 2.75 % 6.09 %

Regulatory Information Provided By: Kyle Frakes - Tnemec Co., Inc.

Coating Environmental Data - As Supplied

Series 90-97 Mixed

| | | | |
|-----------------------------|-------|--------|--|
| Coating Density = | 23.93 | | |
| Specific Gravity = | 2.87 | | |
| | % wt. | % vol. | |
| % Total Volatiles = | 11.19 | 36.93 | |
| % Exempt = | 0.00 | 0.00 | |
| % Non-volatile (% solids) = | 88.81 | 63.07 | |
| % VOC = | 11.19 | 36.93 | |
| % HAP = | 13.51 | 42.53 | |
| % Water = | 0.00 | 0.00 | |

| | |
|----------------------------|--------|
| VOC (lbs/gallon) = | 2.88 |
| VOC (grams/liter) = | 320.95 |
| VOC lbs/gal of solids = | 4.25 |
| HAP's (lbs/gallon) = | 3.23 |
| HAP's lbs/gal of solids = | 5.13 |
| HAP's Kg/Liter of solids = | 0.6142 |

| HAPs Constituent(s): | | % wt | % vol |
|--------------------------|--------------|------|-------|
| MDI Reactive Monomer | 0.55 lbs/gal | 2.31 | 5.59 |
| MDI Volatile Monomer | 0.01 lbs/gal | 0.02 | 0.06 |
| Ethylbenzene | 0.53 lbs/gal | 2.23 | 7.38 |
| Xylene | 2.14 lbs/gal | 8.93 | 29.48 |
| Diisobutyl Ketone | 0.00 lbs/gal | 0.00 | 0.01 |
| 4,6-dimethyl 2-heptanone | 0.00 lbs/gal | 0.00 | 0.01 |

HAP's TOTAL = 3.23 lbs/gal 13.51 % 42.53 %

Regulatory Information Provided By: Kyle Frakes - Tnemec Co., Inc.