State of Idaho
Department of Environmental Quality
Air Quality Division

**AIR QUALITY PERMIT**
**STATEMENT OF BASIS**

# Permit to Construct No. P-2008.0117

## Final

## Frazier Industrial Company – Pocatello Facility

## Pocatello, Idaho

## Facility ID No. 005-00057

**September 12, 2008**

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**Permit Writer** ML

The purpose of this Statement of Basis is to satisfy the requirements of IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, for issuing air permits.

# Table of Contents

# Acronyms, Units, and Chemical Nomenclature

| | |
|---|---|
| AAC | acceptable ambient concentrations for non-carcinogens |
| AFS | AIRS Facility Subsystem |
| AIRS | Aerometric Information Retrieval System |
| CAS No. | Chemical Abstracts Service registry number |
| CFR | Code of Federal Regulations |
| CO | carbon monoxide |
| DEQ | Department of Environmental Quality |
| EL | screening emission levels |
| EPA | U.S. Environmental Protection Agency |
| gal | gallons |
| gal/day | gallons per calendar day |
| gal/hr | gallons per hour |
| gal/yr | gallons per consecutive 12-calendar month period |
| g/min | grams per minute |
| HAP | hazardous air pollutants |
| hr/yr | hours per year |
| ID No. | identification number |
| IDAPA | a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act |
| lb/day | pounds per calendar day |
| lb/gal | pounds per gallon |
| lb/hr | pounds per hour |
| lb/yr | pounds per consecutive 12-calendar month period |
| m | meters |
| MACT | Maximum Achievable Control Technology |
| MFHAP | Metal Fabrication and Finishing Hazardous Air Pollutants |
| MSDS | Material Safety Data Sheets |
| NESHAP | National Emission Standards for Hazardous Air Pollutants |
| $NO_x$ | nitrogen oxides |
| NSPS | New Source Performance Standards |
| PM | particulate matter |
| $PM_{10}$ | particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers |
| PSD | Prevention of Significant Deterioration |
| PTC | permit to construct |
| PTE | potential to emit |
| Rules | Rules for the Control of Air Pollution in Idaho |
| SIC | Standard Industrial Classification |
| SIP | State Implementation Plan |
| SM | synthetic minor |
| $SO_2$ | sulfur dioxide |
| TAP | toxic air pollutants |
| T/yr | tons per consecutive 12-calendar month period |
| UTM | Universal Transverse Mercator |
| VOC | volatile organic compounds |

# 1. FACILITY INFORMATION

## 1.1 Facility Description

Frazier Industrial Company manufactures structural steel storage systems. At the Pocatello facility steel is cut and welded into product components. The type of welding conducted at the facility is metal inert gas welding with a carbon steel electrode. The welded steel components are then bundled and prepared to be coated with paint.

The steel components are coated using a dip tank paint system consisting of three large rectangular steel tanks used to contain the paint. Tank 1 (1,300 gal) and Tank 2 (1,650 gal) contain orange paint and Tank 3 (4,800 gal) contains blue paint. Frazier also has the capability of coating its steel components with yellow paint. The yellow paint is used for special orders and is usually placed in Tank 2 after it has been fully cleaned out. Each dip tank system is internally fabricated. The dip tank system is capable of keeping the paint mixed, filtered and within a predetermined temperature.

Aromatic 100 solvent is stored in one (1) 330 gallon metal mobile storage tote (or equivalent). The solvent is added to the dip tanks to obtain the desired paint viscosity. The solvent is also occasionally used to clean paint from rollers, scrapers and other tools used in the painting operation. The solvent that is used for cleaning is recycled back into the process by being mixed in the dip tanks when needed. The orange, blue, and yellow paint is also stored in metal mobile totes prior to being placed in the dip tanks. Each storage tote is approximately 330 gallons and there are 24 blue, orange, and yellow paint totes. Each tote and dip tank lid is closed when not in use. The facility utilizes a wall exhaust fan to provide building ventilation. The exhaust fans do not control emissions from the building.

Steel components are typically dipped and kept in the dip tank for a minimum of two minutes. Once the steel components are coated they are hoisted out of the tank and allowed to drain for approximately 25 minutes. Next, a nap paint roller is used to smooth out any excess paint and coat unpainted surfaces. The painted steel components are then sent to the storage area where the finished product is stored until it is shipped to the customer.

## 1.2 Permitting Action and Facility Permitting History

This PTC is for a minor modification at an existing minor facility. The following information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

| | |
|---|---|
| March 7, 2008 | P-2008.0011, initial PTC. (S) |
| June 30, 2008 | P-2008.0084, revision to correct a typographical error in the total hazardous air pollutant (HAP) emission limit in Permit Condition 2.3. (S) |

# 2. APPLICATION SCOPE AND APPLICATION CHRONOLOGY

## 2.1 Application Scope

This PTC is a revision to PTC No. P-2008.0084 for an existing structural steel storage systems manufacturing facility. The revision includes the addition of a new yellow paint, an increase in the annual coating material usage rates for the other coating materials, and an increase in welding rod usage.

Frazier has used Trin-Kote yellow paint in the past, but plans to switch to Sheboygan yellow paint once the existing inventory has been used. In addition, Frazier has requested the option to use 55-gallon drums for solvent and paint storage as an alternative to the storage totes currently in use.

Frazier has requested an increase in welding rod usage from 3,500 pounds per week to 3,846 pounds per week (equivalent to 200,000 pounds per year). Changes to TAP emissions based on changes in MSDS information for the welding rod result in a net decrease in overall TAP emissions for the welding operations.

## 2.2 Application Chronology

| | |
|---|---|
| March 7, 2008 | PTC application and $1,000 application fee were received for a revision to PTC No. P-2008.0084. |
| August 5, 2008 thru August 20, 2008 | Opportunity for a public comment period was held. No comment or request for a public comment period was received. |
| August 18, 2008 | Draft permit and statement of basis were sent for peer and Pocatello Regional Office (PRO) review. |
| August 26, 2008 | Application was determined complete. |
| August 26, 2008 | Draft permit and statement of basis were sent for facility review. |
| September 10, 2008 | $5,000 PTC processing fee was received. |
| September 12, 2008 | Final permit and statement of basis were issued. |

# 3. TECHNICAL ANALYSIS

## 3.1 Emission Unit and Control Device

**Table 3.1 EMISSION UNIT AND CONTROL DEVICE INFORMATION**

| Emission Unit ID No. | Description | Control Device |
|---|---|---|
| T01 | Dip coating tank 1<br>Manufacturer: internally fabricated<br>Date installed: March 1996<br>Capacity: 1,300 gal tank | None |
| T02 | Dip coating tank 2<br>Manufacturer: internally fabricated<br>Date installed: March 1996<br>Capacity: 1,650 gal tank | None |
| T03 | Dip coating tank 3<br>Manufacturer: internally fabricated<br>Date installed: 2004<br>Capacity: 4,800 gal tank | None |
| T04 | Paint and solvent storage<br>Capacity: 330-gallon totes, 55-gallon drums, or equivalent fully-enclosed storage tanks | None |
| W01 | Metal inert gas welding<br>Model: carbon steel electrode<br>Wire: E70C | None |

## 3.2 Emissions Inventory

A detailed emissions inventory, including emissions of federally-regulated hazardous air pollutants (HAP) and state-regulated toxic air pollutants (TAP), was provided in the PTC application. The emissions inventory has been reviewed by DEQ and appears to accurately reflect the potential emissions from the facility.

Emissions from coating materials (solvent and paints) at the facility were estimated based on information included in the application, including the requested annual coating material usage rate limits, the proposed operating schedule, and the manufacturer's formulation data (MSDS). A conservative approach was used, in which all of the VOC and HAP within the coating materials were assumed to be 100% emitted. Emissions from each of the paints were calculated based on the permitted daily and annual emission rate limits included in Permit Condition 2.6. Because the facility is utilizing dip coating rather than spray painting, there are no estimated emissions of particulate matter.

Emissions from welding operations were estimated based on the maximum annual welding rod usage provided in the permit application, and assuming that welding would be done continuously during normal business operations (6,240 hours per year). All of the fume emissions were considered 100% particulate matter, and each TAP and HAP emission was calculated based on the weight fraction of each substance contained in the welding rod, based on updated information provided in the application by the manufacturer. Because welding is not inherently limited based on a production throughput limit or maximum equipment capacity (the facility has more than 10 welding machines onsite), a limit to use only carbon steel welding rod was included in Permit Condition 3.3.

The requested modification results in a net overall decrease in TAP emissions from the welding operations, despite a requested increase from 182,000 pounds per year to 200,000 pounds per year of welding rod (3846 pounds per week). Emissions were offset by changes to the MSDS information for the welding rod provided in the application.

A summary of the controlled emissions of criteria pollutants and HAP is shown in Table 3.2. Because emissions are limited based on the coating material usage limits, the welding rod usage limits, and the proposed operating schedule, uncontrolled emissions would be greater than the values presented in Table 3.2.

**Table 3.2 CONTROLLED EMISSIONS ESTIMATES OF CRITERIA POLLUTANTS AND HAP**

| Emissions Unit | $PM_{10}$ | | VOC | | HAP | | $SO_2$, $NO_X$, and CO | | LEAD |
|---|---|---|---|---|---|---|---|---|---|
| | lb/hr | T/yr | lb/hr | T/yr | lb/hr | T/yr | lb/hr | T/yr | lb/hr (quarterly avg) |
| **Point Sources Affected by the Permitting Action** | | | | | | | | | |
| Tank 1 | | | 8.79 | 26.55 | 0.42 | 1.25 | | | |
| Tank 2 | | | 9.93 | 33.66 | 4.95 | 7.67 | | | |
| Tank 3 | | | 12.44 | 38.94 | 0.43 | 1.33 | | | |
| Welding Operations | 0.09 | 0.38 | | | 0.006 | 0.02 | | | |
| **Total, Point Sources** | **0.09** | **0.38** | **31.16** | **99.15** | **5.81** | **10.27** | | | |

A summary of the increase in controlled emissions of criteria pollutants, HAP, and TAP resulting from the addition of a yellow paint and from the requested increase in annual coating material usage rates is shown in Table 3.3 and Table 3.4. None of the controlled emissions exceeded any applicable major source thresholds for criteria pollutants or for HAP (individual or combined thresholds), and the increase in emissions did not exceed any screening emissions level (EL) listed in IDAPA 58.01.01.585-586.

**Table 3.3 CONTROLLED EMISSIONS INCREASE ESTIMATES OF CRITERIA POLLUTANTS AND HAP**

| Emissions Unit | $PM_{10}$ | | VOC | | HAP | | $SO_2$, $NO_X$, and CO | | LEAD |
|---|---|---|---|---|---|---|---|---|---|
| | lb/hr | T/yr | lb/hr | T/yr | lb/hr | T/yr | lb/hr | T/yr | lb/hr (quarterly avg) |
| **Point Sources Affected by the Permitting Action** | | | | | | | | | |
| Tank 1 | | | -0.02 | 0.89 | -0.06 | -0.15 | | | |
| Tank 2 | | | 0.00 | 6.95 | 2.34 | 5.85 | | | |
| Tank 3 | | | -0.03 | 2.64 | 0.05 | 0.21 | | | |
| Welding Operations | 0.00 | 0.00 | | | 0.000 | 0.00 | | | |
| **Total, Point Sources** | **0.00** | **0.00** | **-0.05** | **10.48** | **2.33** | **5.91** | | | |

**Table 3.4 UNCONTROLLED TAP AND HAP EMISSIONS SUMMARY**

| TAP | HAP | Permitted Uncontrolled | Emissions Increase Uncontrolled | Screening Emissions Levels (EL) | Total Uncontrolled 24-hour Average[a] |
|---|---|---|---|---|---|
| | | lb/hr | lb/hr | lb/hr | lb/hr |
| Cumene | Cumene | 0.30 | 0.00 | 16.3 | 0.30 |
| Ethyl Benzene | Ethyl Benzene | 0.37 | 0.58 | 29 | 0.95 |
| Manganese | Manganese | 0.006 | -0.004 | 0.067 | 0.002 |
| Methyl Isobutyl Ketone | Methyl Isobutyl Ketone | 0.00 | 0.67 | 13.7 | 0.67 |
| Toluene | Toluene | 2.06 | 0.00 | 25 | 2.06 |
| Xylene | Xylene | 0.84 | 2.91 | 29 | 3.75 |
| n-Butyl Alcohol | | 1.57 | 1.36 | 10 | 2.93 |
| Iron | | 0.05 | -0.04 | 0.333 | 0.01 |
| Methyl Acetate | | 0.00 | 0.33 | 40.7 | 0.33 |
| Silicon | | 0.00 | 0.0032 | 0.667 | 0.0032 |
| Stoddard Solvent | | 2.75 | 0.00 | 35 | 2.75 |
| Trimethyl benzene (mixed and individual isomers) | | 9.41 | -0.47 | 8.2 | 8.94 |
| | | | | **TOTAL HAP** | 7.74 |
| | | | | **INDIVIDUAL HAP** | 3.75 |

a. 24-hour average only applies to non-carcinogenic TAP.

Daily emission limits were based on 24-hour operation to allow for operational flexibility and because the emission inventory (and previous modeling demonstration in P-2008.0084) is based on 24-hour operation. Annual usage limits were based on the estimated annual emissions provided in the application.

An emissions inventory for this facility, including a comparison of emission rates and limits to the applicable EL or AAC, is included in Appendix B.

## 3.3 Ambient Air Quality Impact Analysis

The facility has demonstrated compliance to DEQ's satisfaction that emissions from this facility will not cause or significantly contribute to a violation of any ambient air quality standard. The facility has also demonstrated compliance to DEQ's satisfaction that the emissions increase due to this permitting action will not exceed any AAC or AACC for TAP. The controlled TAP emissions rates that were compared to the EL and the AAC assumed the use of operational limitations, including operating hours and material usage limits.

Based on the increase in emissions inventory (and the facility-wide emissions inventory), the potential emission rates of toxic air pollutants (TAP) and criteria pollutants from all emission sources except trimethyl benzene were below the corresponding screening emission levels and DEQ modeling thresholds established in IDAPA 58.01.01.585 and 586 and in the State of Idaho Air Quality Modeling Guideline[1]. Compliance with TAP increments was demonstrated because using the controlled ambient concentration is an option for demonstrating compliance in accordance with IDAPA 58.01.01.210.08. Modeling conducted in the development of TAP rules indicates that if a controlled emissions rate is below the EL, controlled ambient concentrations are expected to be below the AAC or AACC. Refer to Table 3.4 in Section 3.1 for a comparison of TAP emission rates to the EL.

The requested modification results in a decrease in the emissions of trimethyl benzene, so a revised modeling analysis of ambient impacts was not required for this permitting action. Refer to Section 3.2 of the Statement of Basis of PTC No. P-2008.0084 for additional information regarding the facility-wide ambient impact analysis completed to demonstrate compliance with the AAC increment for trimethyl benzene.

An emissions inventory for this facility, including a comparison of emission rates and limits to the applicable EL or AAC, is included in Appendix B.

# 4. REGULATORY REVIEW

## 4.1 Attainment Designation (40 CFR 81.313)

The facility is located in Bannock County, which is designated as attainment or unclassifiable for $PM_{2.5}$, CO, $NO_2$, $SO_X$, and Ozone. The facility is located in an area designated as maintenance for $PM_{10}$.

## 4.2 Permit to Construct (IDAPA 58.01.01.201)

The facility's project does not meet the permit to construct exemption criteria contained in Sections 220 through 223 of the Rules. Therefore, a PTC is required.

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

The facility is classified as a synthetic minor facility, because without limits on the potential to emit, HAP and VOC emissions have the potential to exceed major source thresholds. The facility is not classified as a major facility for Tier I permitting purposes, in accordance with IDAPA 58.01.01.008.10. The facility is not a designated facility as defined in IDAPA 58.01.01.006.30. In addition, the facility is classified as SM80 because VOC emissions have the potential to emit at or above 80 percent of the Title V major source threshold.

Total VOC and total HAP emission limits (Permit Condition 2.3), as well as the coating material usage limits (Permit Condition 2.6) are considered synthetic minor limits used to demonstrate compliance with major source thresholds for VOC (100 T/yr) and HAP (10 T/yr for individual HAP and 25 T/yr for combined HAP).

## 4.4 PSD Classification (40 CFR 52.21)

The facility is classified as a PSD minor facility, because without limits on the potential to emit, emissions are expected to be less than PSD major source thresholds.

[1] Table 1, State of Idaho Air Quality Modeling Guideline, Doc ID AQ-011, rev. 1, December 31, 2002.

## 4.5 NSPS Applicability (40 CFR 60)

The facility is not subject to NSPS.

## 4.6 NESHAP Applicability (40 CFR 61)

The facility is not subject to NESHAP in 40 CFR 61.

## 4.7 MACT Applicability (40 CFR 63)

The facility has proposed to operate as a minor source of hazardous air pollutant (HAP) emissions. However, previous Toxic Release Inventories submitted over the years of 2003-2006 (Enforcement Case No. E-070016) indicated that the HAP major source threshold of 10 T/yr was exceeded for the emissions of xylene. As a result, the facility is subject to the provisions of 40 CFR 63, Subpart MMMM.

The emission sources at the facility which are subject to this subpart include the three dip tanks (T01, T02, and T03), which are used to coat steel parts and products, and the paint and solvent storage (T04), which are used to store paint and solvent prior to surface coating.

The emission rate without add-on controls option in 40 CFR 63.3891(b) was requested by the facility to demonstrate compliance with the applicable emission limit in 40 CFR 63.3890. Individual lb HAP/gal solid limits are at or above the limit of 2.6 lb HAP/gal solids for Aromatic 100 solvent, yellow, and blue paints. As a result, the only viable option is to apply the emission rate without add-on controls option to the collection of coating operations (i.e. facility-wide limit).

Refer to Section 4.7 of the Statement of Basis of PTC No. P-2008.0084 for additional discussion of the applicability and requirements of 40 CFR 63, Subpart MMMM –National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products.

The facility is also subject to the provisions of 40 CFR 63, Subpart XXXXXX. Frazier Industrial's operations fall under the Fabricated Metal Products source category.

40 CFR 63, Subpart XXXXXX..... National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories.

40 CFR 63.11514 ..... Am I subject to this subpart?

In accordance with §63.11514(a), the facility is subject to this subpart because the permittee owns and operates an area source that is primarily engaged in the operations in one of the nine categories listed in paragraphs (a)(1) through (9) of this section. The facility's operations fall under the Fabricated Metal Products source category.

In accordance with §63.11514(b), the provisions of this subpart apply to each new and existing facility listed in paragraphs (b)(1) through (5) of this section if materials are used which contain or have the potential to emit metal fabrication or finishing metal HAP (MFHAP), defined to be the compounds of cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form with the exception of lead. As provided in the MSDS for Metalshield MC-710XL, the welding rod contains 1-5 weight percent of manganese, which exceeds the MFHAP threshold of 1.0 percent for noncarcinogens.

In accordance with §63.11514(b)(5), a welding affected source is the collection of all equipment and activities necessary to perform welding operations which use materials that contain MFHAP. In accordance with §63.11514(c), an affected source is existing if the permittee commenced construction or reconstruction of the affected source before April 3, 2008. The collection of welding machines at the facility is therefore an existing source.

40 CFR 63.11515 ..... What are my compliance dates?

In accordance with §63.11515, existing affected sources must achieve compliance with the applicable provisions in this subpart by July 25, 2011.

40 CFR 63.11516 ..... What are my standards and management practices?

In accordance with §63.11516(f), the permittee must comply with the requirements in paragraphs (f)(1) and (2) of this section for each welding operation that uses materials that contain MFHAP or has the potential to emit MFHAP. If the 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), the permittee 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.

The amount of welding rod used at the facility is limited to 3,846 pounds per week (Permit Condition 3.3, equivalent to 200,000 pounds per year). The requirements of this section are included as Permit Conditions 3.4 and 3.6.

40 CFR 63.11517 ..... What are my monitoring requirements?

In accordance with §63.11517(a) and (c), visual determination of fugitive emissions must be performed according to the procedures of EPA Method 22 and Method 9, according to the schedules provided in §63.11517(b) and (d). The requirements of this section are included in Permit Condition 3.6.

40 CFR 63.11519 ..... What are my notification, recordkeeping, and reporting requirements?

In accordance with §63.11519(a)(1), 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, you must submit the Initial Notification required by §63.9(b) 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.

In accordance with §63.11519(a)(2), 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.

The welding operations included in this permitting action are existing affected sources. Therefore the deadline for initial notification for these sources would be no later than July 25, 2011, and the deadline for the notification of compliance status would be on or before November 22, 2011. The requirements of this section are incorporated by reference in Permit Condition 3.7.

In accordance with §63.11519(b), the permittee must prepare and submit annual certification and compliance reports for each affected source. The requirements of this section are incorporated by reference in Permit Condition 3.7.

In accordance with §63.11519(c), the permittee must collect and keep records of the data and information specified. The requirements of this section are incorporated by reference in Permit Condition 3.8. Operation of a spray paint booth, waterspray booth or water curtain, and HVLP spray delivery system have not been proposed, so the requirements of §63.11519(c)(5) through (8) were not listed.

40 CFR 63.11521 ..... Who implements and enforces this subpart?

This section contains information regarding the implementation and enforcement of this subpart. At this time, DEQ has not been delegated authority for enforcement of this subpart.

40 CFR 63.11522 ..... What definitions apply to this subpart?

This section contains the definitions for this subpart.

40 CFR 63.11523 ..... What General Provisions apply to this subpart?

Table 1 – to Subpart XXXXXX of Part 63—Description of Source Categories Affected by this Subpart identifies which source categories are regulated by this subpart.

The facility's operations fall under the Fabricated Metal Products source category.

Table 2 – to Subpart XXXXXX of Part 63—Applicability of General Provisions to Metal Fabrication or Finishing Area Sources identifies the requirements of Subpart A which are applicable to this facility.

Appendix A to Part 63—Test Methods

This section contains the test methods and procedures for this subpart.

## 4.8 CAM Applicability (40 CFR 64)

The facility is a synthetic minor source, and is therefore not subject to CAM.

## 4.9 Permit Conditions Review

This section describes permit conditions that have been added as a result of this permitting action.

Existing Permit Condition 1.4:

Table 1.1 lists all sources of regulated emissions in this PTC.

**Table 1.1 SUMMARY OF REGULATED SOURCES**

| Permit Section | Source Description (ID No.) | Emissions Control |
|---|---|---|
| 2 | Dip coating tank 1 (T01)<br>Manufacturer: internally fabricated<br>Date installed: March 1996<br>Capacity: 1,300 gal tank | None |
| 2 | Dip coating tank 2 (T02)<br>Manufacturer: internally fabricated<br>Date installed: March 1996<br>Capacity: 1,650 gal tank | None |
| 2 | Dip coating tank 3 (T03)<br>Manufacturer: internally fabricated<br>Date installed: 2004<br>Capacity: 4,800 gal tank | None |
| 2 | Paint and solvent storage totes (T04)<br>Capacity: 25 totes, 330-gal each | None |
| 3 | Welding operations (W01)<br>Model: L-50 carbon steel electrode<br>Wire: ER70S-3 | None |

Modified Permit Condition 1.4:

Table 1.1 lists all sources of regulated emissions in this PTC.

**Table 1.1 SUMMARY OF REGULATED SOURCES**

| Permit Section | Source Description (ID No.) | Emissions Control |
|---|---|---|
| 2 | Dip coating tank 1 (T01)<br>Manufacturer: internally fabricated<br>Date installed: March 1996<br>Capacity: 1,300 gal tank | None |
| 2 | Dip coating tank 2 (T02)<br>Manufacturer: internally fabricated<br>Date installed: March 1996<br>Capacity: 1,650 gal tank | None |
| 2 | Dip coating tank 3 (T03)<br>Manufacturer: internally fabricated<br>Date installed: 2004<br>Capacity: 4,800 gal tank | None |
| 2 | Paint and solvent storage (T04)<br>Capacity: 330-gallon totes, 55-gallon drums, and equivalent fully-enclosed storage tanks | None |
| 3 | Welding operations (W01)<br>Model: carbon steel electrode<br>Welding rod: E70C | None |

Frazier has requested the option to use 55-gallon drums for solvent and paint storage as an alternative to the storage totes currently in use. Because totes and drums are fully-enclosed during normal operation, these are considered equivalent storage options and this change is not expected to result in an increase in emissions.

Existing Permit Condition 2.2:

The facility utilizes wall exhaust fans to provide building ventilation. The exhaust fans do not control emissions from the building. Emissions from the dip coating tanks (T01, T02, and T03) and the paint and solvent storage totes (T04) are uncontrolled.

**Table 2.1 DESCRIPTION OF THE COATING OPERATIONS**

| Emission Units (ID No.) | Emissions Control Device | Emission Points |
|---|---|---|
| Dip coating tank 1 (T01) | None | Stack HV01<br>Exit height: 25 ft<br>Exit flow rate: 4,840 acfm<br>Exit temperature: ambient |
| Dip coating tank 2 (T02) | None | Stack S01<br>Exit height: 47 ft<br>Exit diameter: 2 ft<br>Exit flow rate: 8,230 acfm<br>Exit temperature: ambient |
| Dip coating tank 3 (T03) | None | Stack S02<br>Exit height: 52 ft<br>Exit diameter: 2 ft<br>Exit flow rate: 8,230 acfm<br>Exit temperature: ambient |
| Paint and solvent storage totes (T04) | None | Fugitive |

Modified Permit Condition 2.2:

The facility utilizes wall exhaust fans to provide building ventilation. The exhaust fans do not control emissions from the building. Emissions from the dip coating tanks (T01, T02, and T03) and the paint and solvent storage (T04) are uncontrolled.

**Table 2.1 DESCRIPTION OF THE COATING OPERATIONS**

| Emission Units (ID No.) | Emissions Control Device | Emission Points |
|---|---|---|
| Dip coating tank 1 (T01) | None | Stack HV01<br>Exit height: 25 ft<br>Exit flow rate: 4,840 acfm<br>Exit temperature: ambient |
| Dip coating tank 2 (T02) | None | Stack S01<br>Exit height: 47 ft<br>Exit diameter: 2 ft<br>Exit flow rate: 8,230 acfm<br>Exit temperature: ambient |
| Dip coating tank 3 (T03) | None | Stack S02<br>Exit height: 52 ft<br>Exit diameter: 2 ft<br>Exit flow rate: 8,230 acfm<br>Exit temperature: ambient |
| Paint and solvent storage (T04) | None | Fugitive |

This permit condition has been updated to reflect the option use 55-gallon drums (or equivalent fully-enclosed storage tanks) for solvent and paint storage as an alternative to the storage totes currently in use.

Existing Permit Condition 2.3:

The total emissions of VOC and the total emissions of HAP from coating operations shall not exceed any corresponding emission rate limit listed in Table 2.2. All other TAP emission rates from the facility shall be limited to the screening emission levels (EL) in IDAPA 58.01.01.585-586.

**Table 2.2 COATING OPERATIONS EMISSIONS LIMITS[1]**

| Process Description (ID No.) | Total VOC | Total HAP | Trimethyl benzene (mixed and individual isomers) |
|---|---|---|---|
| | T/yr[2] | T/yr[2] | lb/day[3] |
| Coating operations, including the dip coating tanks (T01, T02, and T03) and paint and solvent storage totes (T04) | 88.7 | 4.35 | 225.7 |

[1] In the absence of any other creditable evidence, compliance is assured by complying with the operating, monitoring, and recordkeeping requirements of this permit.
[2] Tons per consecutive 12-calendar month period.
[3] Pounds per calendar day.

Modified Permit Condition 2.3:

The total emissions of VOC and the total emissions of HAP from coating operations shall not exceed any corresponding emission rate limit listed in Table 2.2. All other TAP emission rates from the facility shall be limited to the screening emission levels (EL) in IDAPA 58.01.01.585-586.

**Table 2.2 COATING OPERATIONS EMISSIONS LIMITS[1]**

| Process Description (ID No.) | Total VOC | Total HAP | Trimethyl benzene (mixed and individual isomers) |
|---|---|---|---|
| | T/yr[2] | T/yr[2] | lb/day[3] |
| Coating operations, including the dip coating tanks (T01, T02, and T03) and paint and solvent storage (T04) | 99.2 | 10.30 | 225.7 |

[1] In the absence of any other creditable evidence, compliance is assured by complying with the operating, monitoring, and recordkeeping requirements of this permit.
[2] Tons per consecutive 12-calendar month period.
[3] Pounds per calendar day.

Existing Permit Condition 2.6:

The permittee shall use only the coating materials listed in Table 2.3 as the raw materials, and the material usage rates shall not exceed the values in Table 2.3 to demonstrate compliance with Permit Condition 2.3.

**Table 2.3 COATING MATERIAL USAGE LIMITS**

| Coating Material | Manufacturer Product No. | Material Usage Rate | |
|---|---|---|---|
| | | gal/day[a] | gal/yr[b] |
| Fast Dry Orange - High Solids | 43-62154 | 77 | 18,636 |
| New FD Blue - HS Dip | 43-41491B | 65 | 15,725 |
| MDI Yellow H/S Enamel | EH5182 | 36 | 500 |
| Aromatic 100 Fluid | EQ940652 | 36 | 8,736 |

[a] Gallons per calendar day.
[b] Gallons per consecutive 12-calendar month period.

Modified Permit Condition 2.6:

The permittee shall use only the coating materials listed in Table 2.3 as the raw materials, and the material usage rates shall not exceed the values in Table 2.3 to demonstrate compliance with Permit Condition 2.3.

**Table 2.3 FACILITY-WIDE COATING MATERIAL USAGE LIMITS**

| Coating Material | Manufacturer Product No. | Material Usage Rate | |
|---|---|---|---|
| | | gal/day[a] | gal/yr[b] |
| Fast Dry Orange - High Solids | 43-62154 | 77 | 19,000 |
| New FD Blue - HS Dip | 43-41491B | 65 | 17,000 |
| MDI Yellow H/S Enamel[c] | Trin-Kote EH5182 | 36 | 2,310[c] |
| MDI Yellow Quick-Dry Hi-Solids[c] | Sheboygan 43-62069 | 36 | 4,000[c] |
| Aromatic 100 Fluid | EQ940652 | 36 | 9,300 |

[a] Gallons per calendar day.
[b] Gallons per consecutive 12-calendar month period.
[c] For any consecutive 12-calendar month period in which Trin-Kote EH5182 is used, the total of both Trin-Kote EH5182 and Sheboygan 43-62069 shall be limited to less than 3,570 gal/yr. Beginning 12 months after the last Trin-Kote EH5182 is used, the Sheboygan 43-62069 usage limit of 4,000 gal/yr will take effect.

Frazier has requested the use of a new yellow paint and increases in the annual material usage rates of their other coating materials. This permit condition has been updated to reflect these changes.

Existing Permit Condition 2.7:

Coating material formulation in fractional weight shall not exceed any corresponding limit listed in Table 2.4 to demonstrate compliance with Permit Condition 2.3.

**Table 2.4 COATING MATERIAL FORMULATION LIMITS**

| Substance | CAS No. | Aromatic 100 Fluid EQ940652 Maximum Weight Fraction | New FD Blue HS Dip 43-41491B Maximum Weight Fraction | Fast Dry Orange High Solids 43-62154 Maximum Weight Fraction | MDI Yellow H/S Enamel EH5182 Maximum Weight Fraction |
|---|---|---|---|---|---|
| n-Butyl alcohol | 71-36-3 | | 0.026 | 0.025 | 0.026 |
| Stoddard solvent | 8052-41-3 | | | | 0.200 |
| Trimethyl benzene (mixed and individual isomers) | 95-63-6, 108-67-8 | 0.320 | 0.101 | 0.093 | 0.101 |
| Cumene | 98-82-8 | 0.015 | | | 0.010 |
| Ethyl benzene | 100-41-4 | | | 0.007 | 0.010 |
| Toluene | 108-88-3 | | | | 0.150 |
| Xylene (o-, m-, p-isomers) | 1330-20-7 | 0.022 | | 0.014 | 0.014 |
| Total TAP (VOC) | | 0.320 | 0.127 | 0.118 | 0.327 |
| Total HAP (VOC) | | 0.037 | 0.009 | 0.021 | 0.184 |
| Total VOC | | 0.990 | 0.317 | 0.313 | 0.460 |

Modified Permit Condition 2.7:

Coating material formulation in fractional weight shall not exceed any corresponding limit listed in Table 2.4 to demonstrate compliance with Permit Condition 2.3.

**Table 2.4 COATING MATERIAL FORMULATION LIMITS**

| Substance | CAS No. | Aromatic 100 Fluid | New FD Blue HS Dip | Fast Dry Orange High Solids | MDI Yellow H/S Enamel | MDI Yellow Quick-Dry Hi-Solids |
|---|---|---|---|---|---|---|
| | | EQ940652 | 43-41491B | 43-62154 | EH5182 | EH5182 |
| | | Maximum Weight Fraction | Maximum Weight Fraction | Maximum Weight Fraction | Maximum Weight Fraction | Maximum Weight Fraction |
| Trimethyl benzene (mixed and individual isomers) | 95-63-6, 108-67-8 | 0.320 | 0.101 | 0.093 | 0.080 | 0 |
| Total HAP (VOC) | | 0.037 | 0.011 | 0.017 | 0.180 | 0.317 |
| Total VOC | | 0.990 | 0.316 | 0.316 | 0.460 | 0.351 |

Because coating material emission rates were based directly on the maximum weight percent of each TAP and VOC in the manufacturer's formulation data (MSDS), maximum weight percent limits were included in Permit Condition 2.7. Frazier has requested the use of a new yellow paint and increases in the annual material usage rates of their other coating materials. This permit condition has been updated to reflect these changes. In addition, because this permit condition is used to assist in demonstrating compliance with Permit Condition 2.3, only those limits associated with the emissions limits in Permit Condition 2.3 have been retained, including trimethyl benzene, total HAP, and total VOC. Limits were updated based on the updated MSDS information submitted in the current application. The higher formulation limits of trimethyl benzene were retained since the ambient air impact analysis provided in the initial permit application demonstrated compliance at the emission rate listed in Permit Condition 2.3, and because this limit does not indirectly affect any other emission limits (i.e. total HAP or total VOC limits). Refer to the Statement of Basis of PTC No. 2008.0011 for additional information regarding the ambient air impact analysis that included trimethyl benzene emissions.

Because the dip coating operations do not involve spray painting, no specific limits have been included for solids content or solid TAP (i.e. titanium dioxide, talc, barium, iron oxide, calcium carbonate).

Existing Permit Condition 2.11:

The permittee shall collect and maintain records of the following information on a daily basis to demonstrate compliance with Permit Condition 2.6.

- The name and volume of each coating, thinner, additive, and cleaning material used, in gallons per day.

The permittee shall collect and maintain records of the following information to demonstrate compliance with Permit Condition 2.6. The permittee shall perform the required calculations on a monthly basis, using data from the previous 12 months of operation.

- The name and volume of each coating, thinner, additive, and cleaning material used, in gallons per month.
- The material usage rates for each coating material used, in gallons per consecutive 12-calendar month period. Each material usage rate shall be calculated as a rolling 12-calendar month material usage rate, and determined on a monthly basis.

For each coating material used, the permittee shall collect and maintain a current copy of the information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, to demonstrate compliance with Permit Condition 2.7. This shall include, but not be limited to:

- The manufacturer name and product number.
- The mass fractions of each TAP VOC, in percent by weight.
- The mass fractions of each HAP VOC, in percent by weight.
- The mass fraction of VOC, in percent by weight.
- The density, in pounds per gallon.
- The mass fraction solids, in gallons of solids per gallon of paint, solvent, coating, thinner, additive, or cleaning material.

Modified Permit Condition 2.11:

The permittee shall collect and maintain records of the following information on a daily basis to demonstrate compliance with Permit Condition 2.6.

- The name and volume of each coating, thinner, additive, and cleaning material used, in gallons per day.

The permittee shall collect and maintain records of the following information to demonstrate compliance with Permit Condition 2.6. The permittee shall perform the required calculations on a monthly basis, using data from the previous 12 months of operation.

- The name and volume of each coating, thinner, additive, and cleaning material used, in gallons per month.
- The material usage rates for each coating material used, in gallons per consecutive 12-calendar month period. Each material usage rate shall be calculated as a rolling 12-calendar month material usage rate, and determined on a monthly basis.

For each coating material used, the permittee shall collect and maintain a current copy of the information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, to demonstrate compliance with Permit Condition 2.7. This shall include, but not be limited to:

- The manufacturer name and product number.
- The mass fractions of each TAP VOC, in percent by weight.
- The mass fractions of each HAP VOC, in percent by weight.
- The mass fraction of VOC, in percent by weight.
- The density, in pounds per gallon.
- The mass fraction solids, in gallons of solids per gallon of paint, solvent, coating, thinner, additive, or cleaning material.

The permittee shall maintain records in accordance with General Provision 7 of this permit.

This permit condition has been updated to clarify that records shall be maintained in accordance with General Provision 7.

Existing Permit Condition 3.3:

The permittee shall use only carbon steel ER70S-3 electrodes for welding, and the amount of welding rod used at the facility shall be limited to 3,500 pounds per week.

Modified Permit Condition 3.3:

The permittee shall use only carbon steel electrodes for welding, and the amount of welding rod used at the facility shall be limited to 3,846 pounds per week.

This permit condition has been updated to include the requested increase in welding rod usage, and to clarify the change in welding rod information (MSDS).

Added Permit Condition 3.4:

On and after the compliance date of July 25, 2011 specified in 40 CFR 63.11515, the permittee shall comply with the applicable emission limitations and requirements of the National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63, Subpart XXXXXX.

- The permittee must comply with the requirements in 40 CFR 63.11516(f)(1) and (2) for each welding operation that uses materials that contain MFHAP, or has the potential to emit MFHAP. If the 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), the permittee must demonstrate that management practices or fume control measures are being implemented by complying with the requirements in 40 CFR 63.11516(f)(3) through (8). The requirements in 40 CFR 63.11516(f)(1) through (8) 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.
  - The permittee must operate all equipment, capture, and control devices associated with welding operations according to manufacturer's instructions. The permittee must demonstrate compliance with this requirement by maintaining a record of the manufacturer's specifications for the capture and control devices.
  - The permittee must implement one or more of the following management practices to minimize emissions of MFHAP, as practicable, while maintaining the required welding quality through the application of sound engineering judgment:

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

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

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

    Optimize welding process variables (e.g., electrode diameter, voltage, amperage, welding angle, shield gas flow rate, travel speed) to reduce the amount of welding fume generated; and

    Use a welding fume capture and control system, operated according to the manufacturer's specifications.
  - *MACT Tier 1 compliance requirements for welding.* The permittee must perform visual determinations of welding fugitive emissions as specified in 40 CFR 63.11517(b), at the primary vent, stack, exit, or opening from the building containing the welding operations. The permittee must keep a record of all visual determinations of fugitive emissions along with any corrective action taken.
  - *Requirements upon initial detection of visible emissions from welding.* If visible fugitive emissions are detected during any visual determination required, the permittee must comply with the following requirements:

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. After completing such corrective actions, the permittee must perform a follow-up inspection for visible fugitive emissions, at the primary vent, stack, exit, or opening from the building containing the welding operations.

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 the annual certification and compliance report.

- *MACT 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), the permittee must comply with the following requirements:

  Within 24 hours of the end of the visual determination of fugitive emissions in which visible fugitive emissions were detected, the permittee must conduct a visual determination of emissions opacity, at the primary vent, stack, exit, or opening from the building containing the welding operations.

  In lieu of the requirement to perform visual determinations of fugitive emissions with EPA Method 22, the permittee must perform visual determinations of emissions opacity, using EPA Method 9, at the primary vent, stack, exit, or opening from the building containing the welding operations.

  The permittee must keep a record of each visual determination of emissions opacity performed, along with any subsequent corrective action taken.

  The permittee must report the results of all visual determinations of emissions opacity performed, along with any subsequent corrective action taken, and submit with the annual certification and compliance report.

- *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 40 CFR 63.11516(f)(5) for which the average of the six-minute average opacities recorded is 20 percent or less but greater than zero, the permittee 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.

- *MACT Tier 3 requirements for opacities exceeding 20 percent.* For each visual determination of emissions opacity performed for which the average of the six-minute average opacities recorded exceeds 20 percent, the permittee must comply with the following requirements:

  The permittee must submit a report of exceedence of 20 percent opacity, along with the annual certification and compliance report.

  Within 30 days of the opacity exceedence, the permittee must prepare and implement a Site-Specific Welding Emissions Management Plan. If a Site-Specific Welding Emissions Management Plan has already been prepared in accordance with this paragraph, the permittee must prepare and implement a revised Site-Specific Welding Emissions Management Plan within 30 days.

  During the preparation (or revision) of the Site-Specific Welding Emissions Management Plan, the permittee must continue to perform visual determinations of emissions opacity, beginning on a daily schedule, using EPA Method 9, at the primary vent, stack, exit, or opening from the building containing the welding operations.

  The permittee must maintain records of daily visual determinations of emissions opacity performed, during preparation of the Site-Specific Welding Emissions Management Plan.

The permittee must include these records in the annual certification and compliance report.

This permit condition has been added to incorporate the MACT requirements of 40 CFR 63, Subpart XXXXXX by reference.

Existing Permit Condition 3.5:

The permittee shall monitor and record the type and the total amount of welding rod used each week to demonstrate compliance with Permit Condition 3.3.

Modified Permit Condition 3.5:

The permittee shall monitor and record the type and the total amount of welding rod used each week to demonstrate compliance with Permit Condition 3.3. The permittee shall maintain records in accordance with General Provision 7 of this permit.

This permit condition has been updated to clarify that records shall be maintained in accordance with General Provision 7.

Added Permit Condition 3.6:

On and after the compliance date of July 25, 2011 specified in 40 CFR 63.11515, the permittee shall comply with the applicable emission limitations and requirements of the National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63, Subpart XXXXXX.

- *Site-Specific Welding Emissions Management Plan.* The Site-Specific Welding Emissions Management Plan must comply with the requirements in 40 CFR 63.11516(f)(8)(i) through (iii), in accordance with 40 CFR 63.11516(f)(8).
  - Site-Specific Welding Emissions Management Plan must contain the following information:

    Company name and address;

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

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

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

    A description of additional management practices and/or fume control methods to be implemented, and the projected date of implementation; and

    Any revisions to a Site-Specific Welding Emissions Management Plan must contain copies of all previous plan entries.
  - The Site-Specific Welding Emissions Management Plan must be updated annually to contain current information, and submitted with the annual certification and compliance report.
  - The permittee must maintain a copy of the current Site-Specific Welding Emissions Management Plan in a readily-accessible location for inspector review.
- *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 in accordance with 40 CFR 63.11517(a). The permittee 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.

- *Visual determination of fugitive emissions, graduated schedule.* Visual determinations of fugitive emissions must be performed in accordance with 40 CFR 63.11517(a) and (b), and according to the following schedule:
  - *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.
  - *Weekly Method 22 Testing.* If no visible fugitive emissions are detected in consecutive daily EPA Method 22 tests, for 10 days of work day operation of the process, the permittee 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, the permittee must resume EPA Method 22 testing of that operation once per day during each day that the process is in operation.
  - *Monthly Method 22 Testing.* If no visible fugitive emissions are detected in four consecutive weekly EPA Method 22 tests performed, the permittee 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, the permittee must resume weekly EPA Method 22.
  - *Quarterly Method 22 Testing.* If no visible fugitive emissions are detected in three consecutive monthly EPA Method 22 tests performed, the permittee 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, the permittee must resume monthly EPA Method 22.
- *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, in accordance with 40 CFR 63.11517(c), and while the affected source is operating under normal conditions. The duration of the EPA Method 9 test shall be thirty minutes.
- *Visual determination of emissions opacity for welding Tier 2 or 3, graduated schedule.* The permittee must perform visual determination of emissions opacity in accordance 40 CFR 63.11517(c) through (d) and according to the following schedule:
  - *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.
  - *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 does not exceed 20 percent for 10 days of operation of the process, the permittee 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, the permittee must resume testing every day of operation of the process.
  - *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 does not exceed 20 percent for four consecutive weekly tests, the permittee 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, the permittee must resume testing every five days of operation of the process.
  - *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 does not exceed 20 percent for three consecutive monthly tests, the permittee 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, the permittee must resume testing every 21 days (month) of operation of the process.

- *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 does not exceed 20 percent, the permittee may resume EPA Method 22 testing. In lieu of this, the permittee may elect to continue performing EPA Method 9 tests.

This permit condition has been added to incorporate the MACT requirements of 40 CFR 63, Subpart XXXXXX by reference.

Added Permit Condition 3.7:

On and after the compliance date of July 25, 2011 specified in 40 CFR 63.11515, the permittee shall comply with the applicable emission limitations and requirements of the National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63, Subpart XXXXXX.

- *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 40 CFR 63.11514, you must submit the Initial Notification required by 40 CFR 63.9(b), in accordance with 40 CFR 63.11519(a) 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 40 CFR 63.11519(a)(1)(i) through (iv):
  - The name, address, phone number and e-mail address of the owner and operator;
  - The address (physical location) of the affected source;
  - An identification of the relevant standard (i.e., this subpart); and
  - 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.
- *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 40 CFR 63.11519(a)(2)(i) through (iv) with your notification of compliance status:
  - Your company's name and address;
  - 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;
  - The date of the notification of compliance status.
- *Annual certification and compliance reports.* The permittee must prepare and submit annual certification and compliance reports for each affected source according to the requirements of 40 CFR 63.11519(b)(2) through (7). The annual certification and compliance reporting requirements may be satisfied by reports required under other parts of the CAA, as specified in 40 CFR 63.11519(b)(3).

- *Dates*. Unless the Administrator has approved or agreed to a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must prepare and submit each annual certification and compliance report according to the dates specified in 40 CFR 63.11519(b)(2)(i) through (iii). 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.
  - 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.
  - Each subsequent annual certification and compliance report must cover the subsequent semiannual reporting period from January 1 through December 31.
  - 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 exceedence has occurred during the year, each annual certification and compliance report must be submitted along with the exceedence reports, and postmarked or delivered no later than January 31.
- *General requirements*. The annual certification and compliance report must contain the information specified in 40 CFR 63.11519(b)(4)(i) through (iii), and the information specified in 40 CFR 63.11519(b)(5) through (7) that is applicable to each affected source.
  - Company name and address;
  - 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
  - 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.
- *Visual determination of fugitive emissions requirements*. The annual certification and compliance report must contain the information specified in 40 CFR 63.11519(b)(5)(i) through (iii) for each affected source which performs visual determination of fugitive emissions in accordance with 40 CFR 63.11517(a):
  - The date of every visual determination of fugitive emissions which resulted in detection of visible emissions;
  - A description of the corrective actions taken subsequent to the test; and
  - The date and results of the follow-up visual determination of fugitive emissions performed after the corrective actions.
- *Visual determination of emissions opacity requirements*. The annual certification and compliance report must contain the information specified in 40 CFR 63.11519(b)(6)(i) through (iii) for each affected source which performs visual determination of emissions opacity in accordance with 40 CFR 63.11517(c):
  - The date of every visual determination of emissions opacity;
  - The average of the six-minute opacities measured by the test; and
  - A description of any corrective action taken subsequent to the test.
- *Exceedences of 20 percent opacity for welding affected sources*. As required by 40 CFR 63.11516(f)(7)(i), the permittee 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, in accordance with 40 CFR 63.11519(b)(8). This report must be submitted along with the annual certification and compliance report according to the requirements in

40 CFR 63.11519(b)(1), and must contain the information in 40 CFR 63.11519(b)(8)(iii)(A) and (B):

- The date on which the exceedence occurred; and
- The average of the six-minute average opacities recorded during the visual determination of emissions opacity.

- *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 40 CFR 63.11516(f)(7)(iv) and 40 CFR 63.11519(b)(9), and a copy of the Site-Specific Welding Emissions Management Plan and any subsequent revisions to the plan pursuant to 40 CFR 63.11516(f)(8), along with the annual certification and compliance report, according to the requirements in 40 CFR 63.11519(b)(1).

This permit condition has been added to incorporate the MACT requirements of 40 CFR 63, Subpart XXXXXX by reference.

Added Permit Condition 3.8:

On and after the compliance date of July 25, 2011 specified in 40 CFR 63.11515, the permittee shall comply with the applicable emission limitations and requirements of the National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63, Subpart XXXXXX.

- The permittee must collect and keep records of the data and information specified in 40 CFR 63.11519(c)(1) through (13), according to the requirements in 40 CFR 63.11519(c)(14).
  - *General compliance and applicability records.* Maintain information specified in 40 CFR 63.11519(c)(1)(i) through (ii) for each affected source:

    Each notification and report the permittee submitted to comply with 40 CFR 63 Subpart XXXXXX, and the documentation supporting each notification and report.

    Records of the applicability determinations, 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.

  - *Visual determination of fugitive emissions records.* Maintain a record of the information specified in 40 CFR 63.11519(c)(2)(i) through (iii) for each affected source which performs visual determination of fugitive emissions in accordance with 40 CFR 63.11517(a):

    The date and results of every visual determination of fugitive emissions;

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

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

  - *Visual determination of emissions opacity records.* Maintain a record of the information specified in 40 CFR 63.11519(c)(3)(i) through (iii) for each affected source which performs visual determination of emissions opacity in accordance with 40 CFR 63.11517(c):

    The date of every visual determination of emissions opacity; and

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

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

  - Maintain a record of the manufacturer's specifications for the control devices used to comply with 40 CFR 63.11516.

- *Visual determination of emissions opacity performed during the preparation (or revision) of the Site-Specific Welding Emissions Management Plan.* The permittee 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 40 CFR 63.11516(f)(7)(iii).
- *Site-Specific Welding Emissions Management Plan.* If the permittee has been required to prepare a plan in accordance with 40 CFR 63.11516(f)(7)(iii), the permittee must maintain a copy of the current Site-Specific Welding Emissions Management Plan in the permittee's records and it must be readily available for inspector review.
- *Manufacturer's instructions.* If the permittee complies with this subpart by operating any equipment according to manufacturer's instruction, the permittee must keep these instructions readily available for inspector review.
- *Welding rod usage.* If the permittee operates a new or existing welding affected source which is not required to comply with the requirements of 40 CFR 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), the permittee must maintain records demonstrating welding rod usage on a rolling 12-month basis.
- Records must be maintained according to the following requirements:

  Records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database.

  As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, corrective action, report, or record.

  The permittee 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 40 CFR 63.10(b)(1). The permittee may keep the records off-site for the remaining 3 years.

This permit condition has been added to incorporate the MACT requirements of 40 CFR 63, Subpart XXXXXX by reference.

Added Permit Condition 3.9:

On and after the compliance date of July 25, 2011 specified in 40 CFR 63.11515, the permittee shall comply with the applicable emission limitations and requirements of the National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63, Subpart XXXXXX.

- As required in 40 CFR 63.11523, the permittee must meet each requirement in the following table that applies to the permittee.

**Table 3.2 APPLICABILITY OF GENERAL PROVISIONS TO METAL FABRICATION OR FINISHING AREA SOURCES**

| Citation | Subject |
|---|---|
| 40 CFR 63.1[1] | Applicability. |
| 40 CFR 63.2 | Definitions. |
| 40 CFR 63.3 | Units and abbreviations. |
| 40 CFR 63.4 | Prohibited activities. |
| 40 CFR 63.5 | Construction/reconstruction. |
| 40 CFR 63.6(a), (b)(1)-(b)(5), (c)(1), (c)(2), (c)(5), (g), (i), (j) | Compliance with standards and maintenance requirements. |
| 40 CFR 63.9(a)-(d) | Notification requirements. |
| 40 CFR 63.10(a), (b) except for (b)(2), (d)(1), (d)(4) | Recordkeeping and reporting. |
| 40 CFR 63.12 | State authority and delegations. |
| 40 CFR 63.13 | Addresses of State air pollution control agencies and EPA regional offices. |
| 40 CFR 63.14 | Incorporation by reference. |
| 40 CFR 63.15 | Availability of information and confidentiality. |
| 40 CFR 63.16 | Performance track provisions. |

[1] 40 CFR 63.11514(g), "Am I subject to this subpart?" exempts affected sources from the obligation to obtain Title V operating permits.

This permit condition has been added to incorporate the MACT requirements of 40 CFR 63, Subpart XXXXXX by reference.

## 5. PERMIT FEES

Table 5.1 lists the processing fee associated with this permitting action. The facility is subject to a processing fee of $5,000 in accordance with IDAPA 58.01.01.225 because the proposed modifications result in an increase in emissions of 10 to less than 100 tons per year. Refer to the chronology in Section 2.2 for fee receipt dates.

**Table 5.1 PTC PROCESSING FEE TABLE**

| 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 |
| $PM_{10}$ | 0.0 | 0 | 0.0 |
| VOC | 10.5 | 0 | 10.5 |
| HAP[1,2] | 0.0 | 0 | 0.0 |
| **Total[1,2]:** | **10.5** | **0** | **10.5** |
| **Fee Due** | **$5,000.00** | | |

[1] For the purposes of fee calculation, HAP emissions from $PM_{10}$ are included in the $PM_{10}$ emissions total, and are therefore not included in the HAP emissions total.
[2] For the purposes of fee calculation, HAP emissions from VOC are included in the VOC emissions total, and are therefore not included in the HAP emissions total.

## 6. PUBLIC COMMENT

An opportunity for public comment period on the PTC application was provided in accordance with IDAPA 58.01.01.209.01.c. During this time, there was no comment on the application and no request for a public comment period on DEQ's proposed action. Refer to the chronology in Section 2.2 for comment period opportunity dates.

# Appendix A – AIRS Information

# *AIRS/AFS[a] FACILITY-WIDE CLASSIFICATION[b] DATA ENTRY FORM*

**Permittee/ Facility Name:** **Frazier Industrial Company**
**Facility Location:** **Pocatello, Idaho**
**AIRS Number:** **005-00057**

| AIR PROGRAM POLLUTANT | SIP | PSD | NSPS (Part 60) | NESHAP (Part 61) | MACT (Part 63) | SM80 | TITLE V | AREA CLASSIFICATION A-Attainment U-Unclassified N- Nonattainment |
|---|---|---|---|---|---|---|---|---|
| $SO_2$ | B | | | | | | | U |
| $NO_x$ | B | | | | | | | U |
| CO | B | | | | | | | U |
| $PM_{10}$ | B | | | | | | | A ($PM_{10}$ maintenance) |
| PT (Particulate) | B | | | | | | | U |
| VOC | SM | | | | | Y | | U |
| THAP (Total HAPs) | SM | | | | SM | | | U |
| | | | APPLICABLE SUBPART | | | | | |
| | | | | | A, MMMM, XXXXXX | | | |

[a] Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS)

[b] AIRS/AFS Classification Codes:

A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For HAP only, class "A" is applied to each pollutant which is at or above the 10 T/yr threshold, **or** each pollutant that is below the 10 T/yr threshold, but contributes to a plant total in excess of 25 T/yr of all HAP.

SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.

B = Actual and potential emissions below all applicable major source thresholds.

C = Class is unknown.

ND = Major source thresholds are not defined (e.g., radionuclides).

# Appendix B – Emissions Inventory

## CONTROLLED PTE SUMMARY

| Source | Paint Used | Pollutant | | | | | |
|---|---|---|---|---|---|---|---|
| | | PM-10 | | VOC | | HAP | |
| | | (lb/hr) | (T/yr) | (lb/hr) | (T/yr) | (lb/hr) | (T/yr) |
| Dip Tank 1[a] | Orange + Solvent | | | 8.79 | 26.55 | 0.42 | 1.25 |
| Dip Tank 2[b] | Orange + Solvent or Yellow + Solvent | | | 9.93 | 33.66 | 4.95 | 7.67 |
| Dip Tank 3 | Blue + Solvent | | | 12.44 | 38.94 | 0.43 | 1.33 |
| Welding | Welding | 0.09 | 0.38 | | | 0.002 | 0.01 |
| TOTAL | TOTAL | 0.09 | 0.38 | 31.16 | 99.15 | 5.80 | 10.26 |

## CONTROLLED TAP SUMMARY

| Source | HAP | | | | | | TAP | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cumene | Ethyl Benzene | Mn | MIBK | Toluene | Xylene | n-Butyl Alcohol | Si | Fe | Methyl Acetate | Stoddard | Trimethyl Benzene |
| | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) |
| Dip Tank 1 | na | 0.05 | na | na | na | 0.23 | 0.78 | na | na | na | na | 1.43 |
| Dip Tank 2 | na | 0.05 | na | na | na | 0.23 | 0.78 | na | na | na | na | 1.43 |
| Dip Tank 3 | na | na | na | na | na | na | 1.37 | na | na | na | na | 2.57 |
| Trin-Kote Yellow | 0.14 | 0.14 | na | na | 2.06 | 0.14 | na | na | na | na | 2.75 | 1.10 |
| Sheboygan Yellow | na | 0.71 | na | 0.67 | 0.53 | 2.90 | na | na | na | 0.33 | na | na |
| Solvent | 0.16 | na | na | na | na | 0.24 | na | na | na | na | na | 3.50 |
| Welding | na | na | 0.002 | na | na | na | na | 0.0032 | 0.01 | na | na | na |
| TOTAL[c] | 0.30 | 0.95 | 0.002 | 0.67 | 2.59 | 3.75 | 2.93 | 0.0032 | 0.01 | 0.33 | 2.75 | 8.94 |
| EL (lb/hr) | 16.300 | 29 | 0.067 | 13.7 | 25.0 | 29 | 10 | 0.667 | 0.333 | 40.7 | 35 | 8.2 |
| EL Exceeded (Y/N)? | No | No | No | No | No | No | No | No | No | No | No | **Yes** |
| AAC $\mu g/m^3$ | | | | | | | | | | | | 6150 |
| Dispersion coefficient | | | | | | | | | | | | 281.1 |
| Maximum 24-hr impact | | | | | | | | | | | | 2512.1 |
| % of AAC or EL | 1.85% | 3.26% | 2.65% | 4.93% | 10.35% | 12.92% | 29.29% | 0.48% | 4.12% | 0.81% | 7.85% | 40.85% |

[c] Yellow paint is used in one of the three tanks. Worst case total maximum trimethyl benzene assumes Dip Tank 1, 2, and 3 with blue and orange; and yellow not operating.