

## **Statement of Basis**

**Permit to Construct No. P-2011.0114  
Project No. 61537**

**Frazier Industrial Co. - Idaho Falls  
Idaho Falls, Idaho**

**Facility ID No. 019-00086**

**Final**

**August 25, 2016  
Shawnee Chen, P.E.   
Senior Air Quality Engineer**

**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.**

<b>ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE.....</b>	<b>3</b>
<b>FACILITY INFORMATION .....</b>	<b>5</b>
Description .....	5
Permitting History .....	5
Application Scope .....	5
Application Chronology .....	5
<b>TECHNICAL ANALYSIS.....</b>	<b>6</b>
Emissions Units and Control Devices .....	6
Emissions Inventories .....	7
Ambient Air Quality Impact Analyses.....	10
<b>REGULATORY ANALYSIS.....</b>	<b>10</b>
Attainment Designation (40 CFR 81.313) .....	10
Facility Classification.....	10
Permit to Construct (IDAPA 58.01.01.201).....	11
Tier II Operating Permit (IDAPA 58.01.01.401) .....	11
Visible Emissions (IDAPA 58.01.01.625) .....	11
Odors (IDAPA 58.01.01.775-776).....	11
Rules for Control of Fugitive Dust (IDAPA 58.01.01.650).....	11
Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70).....	11
PSD Classification (40 CFR 52.21) .....	12
NSPS Applicability (40 CFR 60).....	12
NESHAP Applicability (40 CFR 61) .....	12
NESHAP Applicability (40 CFR 63) .....	12
Permit Conditions Review .....	12
<b>PUBLIC REVIEW.....</b>	<b>13</b>
Public Comment Opportunity .....	13
<b>APPENDIX A – EMISSIONS INVENTORIES</b>	
<b>APPENDIX B –APPLICABILITY DETERMINATION EMAIL FROM EPA</b>	
<b>APPENDIX C – PROCESSING FEE</b>	

## ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

AAC	acceptable ambient concentrations
AACC	acceptable ambient concentrations for carcinogens
acfm	actual cubic feet per minute
AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BMP	best management practices
Btu	British thermal units
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CAS No.	Chemical Abstracts Service registry number
CBP	concrete batch plant
CEMS	continuous emission monitoring systems
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CI	compression ignition
CMS	continuous monitoring systems
CO	carbon monoxide
COMS	continuous opacity monitoring systems
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EI	emissions inventory
EL	screening emission levels
EPA	U.S. Environmental Protection Agency
FEC	Facility Emissions Cap
Frazier	Frazier Industrial Company
gpm	gallons per minute
gph	gallons per hour
gr	grain (1 lb = 7,000 grains)
HAP	hazardous air pollutants
HMA	hot mix asphalt
hp	horsepower
hr/yr	hours per year
ICE	internal combustion engines
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometers
lb/hr	pounds per hour
lb/qtr	pound per quarter
m	meters
MACT	Maximum Achievable Control Technology
mg/dscm	milligrams per dry standard cubic meter
MMBtu	million British thermal units
MMscf	million standard cubic feet
NAAQS	National Ambient Air Quality Standard
NAICS	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxides

NSPS	New Source Performance Standards
O&M	operation and maintenance
PAH	polyaromatic hydrocarbons
PC	permit condition
PCB	polychlorinated biphenyl
PERF	Portable Equipment Relocation Form
PM	particulate matter
PM <sub>10</sub>	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
POM	polycyclic organic matter
ppm	parts per million
PSD	Prevention of Significant Deterioration
PTC	permit to construct
PTC/T2	permit to construct and Tier II operating permit
PTE	potential to emit
RAP	recycled asphalt pavement
RFO	reprocessed fuel oil
Rules	Rules for the Control of Air Pollution in Idaho
scf	standard cubic feet
SCL	significant contribution limits
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SM	synthetic minor
SM80	synthetic minor facility with emissions greater than or equal to 80% of a major source threshold
SO <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	sulfur oxides
T/yr	tons per consecutive 12-calendar month period
T2	Tier II operating permit
TAP	toxic air pollutants
TEQ	toxicity equivalent
T-RACT	Toxic Air Pollutant Reasonably Available Control Technology
U.S.C.	United States Code
UTM	Universal Transverse Mercator
VOC	volatile organic compounds
yd <sup>3</sup>	cubic yards
µg/m <sup>3</sup>	micrograms per cubic meter

## **FACILITY INFORMATION**

### ***Description***

Frazier Industrial Company (Frazier) manufactures structural steel storage systems. Steel is delivered to the facility and is then cut and welded into product components. The type of welding conducted at the facility is gas metal arc welding or metal inert gas welding. 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 (3,636 gal) and Tank 2 (1,793 gal) typically contain orange paint and Tank 3 (8,311 gal) contains blue paint. Frazier also has the capability of coating its steel components with yellow paint. The yellow paint is used less frequently than the orange and blue paint and based on customer demand. The yellow paint is placed in Tank 2 after the orange paint 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 55-gallon drums. 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 the lid is closed when not in use. The dip tank is open when steel is being dipped and is closed when not in use. The facility utilizes a wall exhaust fan to provide building ventilation. The exhaust fan does 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.

### ***Permitting History***

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).

September 29, 2011      P-2011.0114 Project 61537, initial PTC for moving the facility from Pocatello to Idaho Falls, Permit status (A, but will become S upon issuance of this permit)

### ***Application Scope***

This PTC is for a minor modification at an existing minor facility. The applicant has proposed to

- Increase the blue paint annual usage from 16,000 gal to 20,500 gal.
- Reduce the orange paint annual usage from 20,000 gal to 15,000 gal.
- Remove 40 CFR 63 Subpart XXXXXX requirements to reflect EPA's non-applicability determination made on October 25, 2015.

### ***Application Chronology***

June 12, 2015	DEQ received an application.
June 17, 2015	DEQ received an application fee.
July 13, 2015	DEQ determined that the application was incomplete.

August 7, 2015 DEQ received supplemental information from the applicant.  
 August 31, 2015 DEQ determined that the application was complete.  
 October 20, 2015 DEQ made available the draft permit and statement of basis for peer and regional office review.  
 October 26, 2015 DEQ made available the draft permit and statement of basis for applicant review.  
 June 1, 2016 DEQ received the permit processing fee.  
 August 25, 2016 DEQ issued the final permit and statement of basis.

## TECHNICAL ANALYSIS

### *Emissions Units and Control Devices*

Table 1 EMISSIONS UNIT AND CONTROL DEVICE INFORMATION

ID No.	Source Description	Control Equipment Description	Emissions Point ID No. and Description
T01	<u>Dip Tank 1:</u> Manufacturer: Internally fabricated Tank Capacity: 3,636 gallon Material Usage Limit/Maximum Projected Paint and Solvent Usage: <ul style="list-style-type: none"> <li>• 7,500 gallons orange paint</li> <li>• Total 9,300 gallons of Aromatic 100 Solvent for all three dip tanks</li> </ul>	None	<u>The Stack</u> Exit Height: 39 ft (12 m) Exit Diameter: 2 ft (0.6 m) Exit Flow rate: 8,230 acfm Exit Temperature: ambient temperature
T02	<u>Dip Tank 2:</u> Manufacturer: Internally fabricated Tank Capacity: 1,793 gallon Material Usage Limit/Maximum Projected Paint and Solvent Usage: <ul style="list-style-type: none"> <li>• 7,500 gallons orange paint</li> <li>• 4,000 gallons yellow paint occasionally used in Dip Tank 2</li> <li>• Total 9,300 gallons of Aromatic 100 Solvent for in all three dip tanks</li> </ul>	None	
T03	<u>Dip Tank 3:</u> Manufacturer: Internally fabricated Tank Capacity: 8,311 gallon Material Usage Limit/Maximum Projected Paint and Solvent Usage: <ul style="list-style-type: none"> <li>• 20,500 gallons blue paint</li> <li>• Total 9,300 gallons of Aromatic 100 Solvent for all three dip tanks</li> </ul>	None	

NA	<u>Paint and solvent storage</u> For Orange, Blue, and Yellow Paint Storage: 330-gallon totes or equivalent fully-enclosed storage containers  For Aromatic 100 Solvent Storage: 55-gallon drums or equivalent fully-enclosed storage containers	None	NA
W01	<u>Steel Welding</u> Material Usage Limit/Maximum Projected Usage: 200,000 lb/yr wire or welding electrode (S07)	None	Total 20 vents  <u>Five vents with the following exhaust parameters</u>  Exit Height: 29 ft (8.8 m) Exit Diameter: 3 ft (0.9 m) Exit Flow rate: 4,840 acfm Exit Temperature: ambient temperature  <u>Five vents with the following exhaust parameters</u>  Exit Height: 33 ft (10 m) Exit Diameter: 3 ft (0.9 m) Exit Flow rate: 4,840 acfm Exit Temperature: ambient temperature  <u>Five vents with the following exhaust parameters</u>  Exit Height: 30 ft (9.1 m) Exit Diameter: 3 ft (0.9 m) Exit Flow rate: 4,840 acfm Exit Temperature: ambient temperature  <u>Five vents with the following exhaust parameters</u>  Exit Height: 27 ft (8.2 m) Exit Diameter: 3 ft (0.9 m) Exit Flow rate: 4,840 acfm Exit Temperature: ambient temperature

### ***Emissions Inventories***

The EI estimation used the same method as that for the PTC No. P-2011.0114 Project 60892 issued on September 29, 2011. The applicant used the previous PTC EI spreadsheet as a starting point, changed the allowable paint usage from 10,000 gal to 7,500 gal for Dip Tank 1 and Dip Tank 2, respectively, and changed the allowable paint usage from 16,000 gal to 20,500 for Dip Tank 3. No other changes are made to the EI spreadsheet.

Summaries of the estimated uncontrolled and controlled emissions of criteria pollutants, TAP, and HAP from the facility are provided in the following tables. Detailed calculations can be found in the applications for this permit action and for PTC No. P-2011.0114 Project 60892 issued on September 29, 2011.

### **Uncontrolled Emissions:**

The following table is taken from the SOB for PTC No. P-2011.0114 Project 60892 issued on September 29, 2011. The table presents the uncontrolled emissions for criteria pollutants and HAP. Annual emissions were estimated by multiplying the maximum hourly emissions rate with the maximum operating hours of 5,600 hr/yr.

The coating process is a batch process. Due to the nature of the process, the coating process can only operate a maximum of 5,600 hr/yr according to the application for PTC No. P-2011.0114 Project 60892 issued on September 29, 2011.

**Table 2 UNCONTROLLED EMISSIONS FOR CRITERIA POLLUTANTS AND HAP**

	PM <sub>10</sub> / PM <sub>2.5</sub> (lb/hr, max)	PM <sub>10</sub> / PM <sub>2.5</sub> (T/yr)	Lead (lb/hr, max)	Lead (T/yr)	VOC (lb/hr, max)	VOC (T/yr)	HAP (lb/hr, max)	HAP (T/yr)
Dip Tank 1 <sup>a b c</sup> Orange					13.97	39.11	0.77	2.15
Dip Tank 2 <sup>b c</sup> Orange or Yellow					13.97	61.86	0.77	2.28
Dip Tank 3 <sup>c</sup> Blue					13.96	39.08	0.13	0.37
Welding Total <sup>d e</sup>	0.13	0.35	1.3E-05	3.5E-05			0.0001	0.0002
<b>Total</b>	<b>0.13</b>	<b>0.35</b>	<b>1.3E-05</b>	<b>3.5E-05</b>	<b>41.90</b>	<b>140.05</b>	<b>1.67</b>	<b>4.80</b>

<sup>a</sup> Solvent is used in all three tanks. Assumed total solvent emissions are divided equally between the three tanks.

<sup>b</sup> Yellow paint is occasionally used in Tank 2. Worst case annual tons per year VOC and HAPs assumes orange + yellow + solvent in Tank 2. Worst case hourly lb/hr VOC and HAPs assumes orange + solvent in Tank 2

<sup>c</sup> The vertical dip tank stacks will have rain caps.

<sup>d</sup> Welding vertical vents will have butterfly closure when fan is not operating

<sup>e</sup> Welding emissions will be divided equally between 20 vents; 5 equally spaced down center of each Bay; 5 located throughout building based on ventilation needs.

### Pre-Project Potential to Emit

The following pre-project potential to emit (PTE) is taken from the SOB for PTC No. P-2011.0114 Project 60892, issued on September 29, 2011.

**Table 3 PRE-PROJECT POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS AND HAP**

	PM <sub>10</sub> / PM <sub>2.5</sub> (T/yr)	Lead (T/yr)	VOC (T/yr)	HAP (T/yr)
Dip Tank 1 <sup>a b c</sup> Orange			27.69	1.42
Dip Tank 2 <sup>b c</sup> Orange or Yellow			33.11	1.45
Dip Tank 3 <sup>c</sup> Blue			37.50	0.36
Welding Total <sup>d e</sup>	0.35	3.5E-05		0.054
<b>Total</b>	<b>0.35</b>	<b>3.5E-05</b>	<b>98.30</b>	<b>3.29</b>

<sup>a</sup> Solvent is used in all three tanks. Assumed total solvent emissions are divided equally between the three tanks.

<sup>b</sup> Yellow paint is occasionally used in Tank #2. Worst case annual tons per year VOC and HAPs assumes orange + yellow + solvent in Tank 2. Worst case hourly lb/hr VOC and HAPs assumes orange + solvent in Tank 2

<sup>c</sup> Dip tank stacks will have rain caps - vertical stacks

<sup>d</sup> Welding vertical vents will have butterfly closure when fan is not operating

<sup>e</sup> Welding emissions will be divided equally between 20 vents; 5 equally spaced down center of each Bay; 5 located throughout building based on ventilation needs.

### Post Project Potential to Emit

The following table presents the post project PTE for criteria pollutants and HAP from the facility as submitted by the applicant and verified by DEQ staff. Detailed calculations can be found in Appendix A.

**Table 4 POST PROJECT POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS AND HAP**

	PM <sub>10</sub> /PM <sub>2.5</sub> (T/yr)	Lead (T/yr)	VOC (T/yr)	HAP (T/yr)
Dip Tank 1 <sup>a b c</sup> Orange			23.81	1.17

	PM <sub>10</sub> /PM <sub>2.5</sub> (T/yr)	Lead (T/yr)	VOC (T/yr)	HAP (T/yr)
Dip Tank 2 <sup>b,c</sup> Orange or Yellow			29.22	1.20
Dip Tank 3 <sup>c</sup> Blue			45.10	0.36
Welding Total <sup>d,e</sup>	0.35	3.5E-05		0.05
<b>Total</b>	<b>0.35</b>	<b>3.5E-05</b>	<b>98.13</b>	<b>2.78</b>

<sup>a</sup> Solvent is used in all three tanks. Assumed total solvent emissions are divided equally between the three tanks.

<sup>b</sup> Yellow paint is occasionally used in Tank #2. Worst case annual tons per year VOC and HAPs assumes orange + yellow + solvent in Tank #2. Worst case hourly lb/hr VOC and HAPs assumes orange + solvent in Tank #2

<sup>c</sup> Dip tank stacks will have rain caps - vertical stacks

<sup>d</sup> Welding vertical vents will have butterfly closure when fan is not operating

<sup>e</sup> Welding emissions will be divided equally between 20 vents; 5 equally spaced down center of each Bay; 5 located throughout building based on ventilation needs.

As demonstrated in Tables 2 and 4, this facility has uncontrolled potential to emit for VOC emissions greater than the Major Source threshold of 100 T/yr and a controlled potential to emit for VOC emissions less than the Major Source threshold of 100 T/yr. Therefore, this facility is designated as a Synthetic Minor facility. As demonstrated in Table 4 the facility's PTE for VOC is greater than 80% of the Major Source thresholds of 100 T/yr. Therefore, this facility will be designated as an SM80 facility.

### Change in Potential to Emit

The change in facility-wide potential to emit is used to determine if a public comment period may be required or if emissions modeling may be required and to determine the processing fee per IDAPA 58.01.01.225. The following table presents the facility-wide change in the potential to emit for criteria pollutants and HAP.

**Table 5 CHANGES IN POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS AND HAP**

	PM <sub>10</sub> / PM <sub>2.5</sub> (T/yr)	Lead (T/yr)	VOC (T/yr)	HAP (T/yr)
Dip Tank 1 Orange			-3.89	-0.25
Dip Tank 2 Orange or Yellow			-3.89	-0.25
Dip Tank 3 Blue			7.60	0.00
Welding Total	0	0	0	0
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>-0.17</b>	<b>-0.50</b>

### TAP Emissions

A summary of TAP emissions are provided in the following table. The TAP emissions decrease as a result of this project. Modeling is not required when TAP emissions decrease.

Pre- and post project, as well as the change in TAP emissions are presented in the following table:

**Table 6 PRE- AND POST PROJECT TAP EMISSIONS SUMMARY POTENTIAL TO EMIT**

Toxic Air Pollutants	Pre-Project 24-hour Average Emissions Rates for Units at the Facility (lb/hr)	Post Project 24-hour Average Emissions Rates for Units at the Facility (lb/hr)	Change in 24-hour Average Emissions Rates for Units at the Facility (lb/hr)	Screening Emission Level (lb/hr)	Exceeds Screening Level? (Y/N)
n-Butyl Alcohol	2.4	1.8	-6.E-01	10	No
Xylene	1.3	0.7	-6.E-01	29	No

<b>Toxic Air Pollutants</b>	<b>Pre-Project 24-hour Average Emissions Rates for Units at the Facility (lb/hr)</b>	<b>Post Project 24-hour Average Emissions Rates for Units at the Facility (lb/hr)</b>	<b>Change in 24-hour Average Emissions Rates for Units at the Facility (lb/hr)</b>	<b>Screening Emission Level (lb/hr)</b>	<b>Exceeds Screening Level? (Y/N)</b>
Ethyl Benzene	0.22	0.15	-7.E-02	29	No
Stoddard	1.0	1.0	0.E+00	35	No
Cumene	0.1	0.1	0.E+00	16.3	No
Trimethyl Benzene	12.9	10.5	-2.E+00	8.2	No

### **Post Project HAP Emissions**

Table 4 presents the post project HAP PTE from all emissions units at the facility based on the information in the EI submitted by the applicant and verified by DEQ staff. The HAP PTE is below 10 T/yr.

### ***Ambient Air Quality Impact Analyses***

Modeling is not required because emissions from this project decrease.

## **REGULATORY ANALYSIS**

### ***Attainment Designation (40 CFR 81.313)***

The facility is located in Bonneville County, which is designated as attainment or unclassifiable for PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub>, 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:

- A = Use when any one HAP has actual or potential emissions  $\geq 10$  T/yr or if the aggregate of all HAPS (Total HAPs) has actual or potential emissions  $\geq 25$  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  $\geq 8$  T/yr of a single HAP or  $\geq 20$  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  $\geq 80$  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 7 REGULATED AIR POLLUTANT FACILITY CLASSIFICATION**

Pollutant	Uncontrolled PTE (T/yr)	Permitted PTE (T/yr)	Major Source Thresholds (T/yr)	AIRS/AFS Classification
PM	< 100	< 100	100	B
PM <sub>10</sub> /PM <sub>2.5</sub>	< 100	< 100	100	B
SO <sub>2</sub>	< 100	< 100	100	B
NO <sub>x</sub>	< 100	< 100	100	B
CO	< 100	< 100	100	B
VOC	> 100	98.1	100	SM80
HAP (single)	< 10	< 3.29	10	B
HAP (Total)	< 25	3.29	25	B

**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 modified 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 applicant has not requested an optional Tier II operating permit. 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 emitting particulate matter at this facility are subject to the State of Idaho visible emissions standard of 20% opacity.

**Odors (IDAPA 58.01.01.775-776)**

Frazier is subject to IDAPA 58.01.01.775-776 that requires no emissions of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.

**Rules for Control of Fugitive Dust (IDAPA 58.01.01.650)**

Frazier is subject to IDAPA 58.01.01.650 requiring that all reasonable precautions be taken to prevent the generation of fugitive dust.

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

IDAPA 58.01.01.301 ..... Requirement to Obtain Tier I Operating Permit

The facility has taken a throughput limit to become a synthetic minor source for the Title V program. Post project facility-wide emissions from this facility do not have a potential to emit greater than 100 tons per year for any criteria pollutants (i.e., PM<sub>2.5</sub>/PM<sub>10</sub> and VOC) and 10 tons per year for any one HAP or 25 tons per year for all HAPs combined. 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 PSD major stationary source as defined in 40 CFR 52.21(b)(1). 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)**

Frazier is not subject to any NSPS requirements.

### **NESHAP Applicability (40 CFR 61)**

Frazier is not subject to any NESHAP requirements in 40 CFR 61.

### **NESHAP Applicability (40 CFR 63)**

#### Non-applicable

Subpart XXXXXX—National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories

The facility is not subject to this subpart because Frazier's Standard Industrial Classification (SIC) and North American Industry Classification System (NAICS) code is not included in one of the covered codes for this subpart. Refer to the applicability determination email from EPA in Appendix B

Subpart MMMM—National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

*In accordance with 40 CFR 63.3881 (b) You are subject to this subpart if you own or operate a new, reconstructed, or existing affected source, as defined in §63.3882, that uses 946 liters (250 gallons (gal)) per year, or more, of coatings that contain hazardous air pollutants (HAP) in the surface coating of miscellaneous metal parts and products defined in paragraph (a) of this section; and that is a major source, is located at a major source, or is part of a major source of emissions of HAP. A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (Mg) (10 tons) or more per year or any combination of HAP at a rate of 22.68 Mg (25 tons) or more per year. You do not need to include coatings that meet the definition of non-HAP coating contained in §63.3981 in determining whether you use 946 liters (250 gal) per year, or more, of coatings in the surface coating of miscellaneous metal parts and products.*

Frazier is not a major source, located at a major source, or part of a major source of emissions of HAP; therefore, Frazier is not subject to this subpart.

### **Permit Conditions Review**

This section describes those permit conditions that have been added, revised, modified or deleted as a result of this permitting action.

Permit condition numbering is changed as a result of using the current PTC template.

Permit Condition 1.1 describes the scope of this permitting action.

Permit Condition 1.3 states that this PTC replaces PTC No. P-2011.0114 Project 60892, issued on September 29, 2011.

Table 1.1 and Table 2.1 are revised to include the new paint usage limits for blue paint and orange paint. A typo "lb/hr" is changed to "lb/yr" under Steel Welding in both tables.

Permit Condition 2.3 is revised to change VOC emissions limit from 98.3 T/yr to 93.1 T/yr as a result of paint usages change.

Permit Condition 2.7 was paragraph No. 2 of the old Permit Condition 18 and is kept for the revised PTC as a reasonable permit condition. Because the welding emissions were calculated using manufacturer's emissions data, PC 2.7 requires the permittee to use gas metal arc welding or metal inert gas welding and to operate all equipment associated with welding operations according to manufacturer's instructions.

Table 2.2 is revised to reflect the paint throughput changes.

Permit Condition 2.14 is revised to remove EPA from the reporting address list because the facility is a minor source and is not subject to any federal regulations.

Old Permit Conditions 16 to 21 are removed because the facility is not subject to 40 CFR 63 Subpart XXXXXX.

General Provisions are replaced with the ones in the current PTC template.

## **PUBLIC REVIEW**

### ***Public Comment Opportunity***

Because this permitting action does not authorize an increase in emissions, an opportunity for public comment period was not required or provided in accordance with IDAPA 58.01.01.209.04.

## APPENDIX A – EMISSIONS INVENTORIES

**PRE-PROJECT POTENTIAL TO EMIT**

Emissions Unit	PM-10/ PM-2.5 (T/yr)	Lead (T/yr)	VOC (T/yr)	HAP (T/yr)
Dip Tank 1 <sup>a b c</sup> Orange			27.69	1.42
Dip Tank 2 <sup>b c</sup> Orange or Yellow			33.11	1.45
Dip Tank 3 <sup>c</sup> Blue			37.50	0.36
Welding Total <sup>d</sup>	0.35	3.5E-05		0.05
<b>Total PTE</b>	<b>0.35</b>	<b>0.00</b>	<b>98.30</b>	<b>3.29</b>

**POST PROJECT POTENTIAL TO EMIT**

Emissions Unit	PM-10/ PM-2.5 (T/yr)	Lead (T/yr)	VOC (T/yr)	HAP (T/yr)
Dip Tank 1 <sup>a b c</sup> Orange			23.81	1.17
Dip Tank 2 <sup>b c</sup> Orange or Yellow			29.22	1.20
Dip Tank 3 <sup>c</sup> Blue			45.10	0.36
Welding Total <sup>d</sup>	0.35	3.5E-05		0.05
<b>Total PTE</b>	<b>0.35</b>	<b>3.5E-05</b>	<b>98.13</b>	<b>2.78</b>

**CHANGE IN POTENTIAL TO EMIT**

Emissions Unit	PM-10/ PM-2.5 (T/yr)	Lead (T/yr)	VOC (T/yr)	HAP (T/yr)
Dip Tank 1 <sup>a b c</sup> Orange			-3.89	-0.25
Dip Tank 2 <sup>b c</sup> Orange or Yellow			-3.89	-0.25
Dip Tank 3 <sup>c</sup> Blue			7.60	0.00
Welding Total <sup>d</sup>	0	0		0
<b>Total PTE</b>	<b>0.00</b>	<b>0.0E+00</b>	<b>-0.17</b>	<b>-0.50</b>

<sup>a</sup> Solvent is used in all three tanks. Assumed total solvent emissions are divided equally between the three tanks.

<sup>b</sup> Yellow paint is occasionally used in Tank #2

Worst case annual tpy VOC and HAPs assumes orange + solvent in Tank #2 and yellow + solvent being used in Tank #2.

Worst case hourly lb/hr VOC and HAPs assumes orange + solvent in Tank #2

<sup>c</sup> Dip tank stacks will have rain caps- vertical stacks

<sup>d</sup> Welding emissions will be divided equally between 20 vents; 5 equally spaced down center of each Bay; 5 located throughout building based on ventilatic

**FRAZIER INDUSTRIAL COMPANY  
IDAHO FALLS, ID**

<b>Toxic Air Pollution</b>	<b>Pre-Project 24-hr Avg. Emissions Rate (lb/hr)</b>	<b>Post-Project 24-hr Avg. Emissions Rate (lb/hr)</b>	<b>Change in 24-hr Avg. Emissions Rate (lb/hr)</b>	<b>Screening Level (lb/hr)</b>	<b>Exceeds Screening Level (Y/N)</b>
n-Butyl Alcohol	2.4	1.8	-6.E-01	10	No
Xylene	1.3	0.7	-6.E-01	29	No
Ethyl Benzene	0.22	0.15	-7.E-02	29	No
Stoddard	1.0	1.0	0.E+00	35	No
Cumene	0.1	0.1	0.E+00	16.3	No
Trimethyl Benzene	12.9	10.5	-2.E+00	8.2	No

**DIP TANK 1  
PROPOSED EMISSIONS  
VOC and HAP**

**Max VOC Coating:** New Fast Dry Orange- High Solids  
**Coating ID:** 43-62154B  
**Density (lb/gal):** 10.49  
**Potential Gallons Mixture Applied (gal/yr)<sup>b</sup>:** 7,500  
**Max Potential Gallons (gal/hr)<sup>c</sup>:** 3.00

Volatile Component	CAS No.	Max Wt. Fraction	VOC Emissions (lb/hr)	VOC Emissions (T/yr)	HAP Emissions (lb/hr)	HAP Emissions (T/yr)
1,2,4-Trimethylbenzene	95-63-6	0.094	2.96	3.71	na	na
n-Butyl Alcohol	71-36-3	0.026	0.82	1.02	na	na
Xylene (mixed isomers)	1330-20-7	0.0169	0.53	0.66	0.532	0.66
Ethyl Benzene	100-41-4	0.004	0.11	0.14	0.113	0.14
Other VOCs	108-67-8	0.1775	5.59	6.98	na	na
<b>TOTAL<sup>a</sup></b>		0.3182	10.01	12.52	0.65	0.81

<sup>a</sup>Only non-exempt VOC and HAP components are summed.

<sup>b</sup>Total Orange Paint Usage is 15,000 gal/yr and is divided between Tanks #1 and #2

<sup>c</sup>Maximum potential gallons per hour estimated based on estimated maximum paint usage based on painting records

**DIP TANK 2  
PROPOSED EMISSIONS  
VOC and HAP**

**Max VOC Coating:** New Fast Dry Orange- High Solids  
**Coating ID:** 43-62154B  
**Density (lb/gal):** 10.49  
**Potential Gallons Mixture Applied (gal/yr)<sup>b</sup>:** 7,500  
**Max Potential Gallons (gal/hr)<sup>c</sup>:** 3.00

Volatile Component	CAS No.	Max Wt. Fraction	VOC Emissions (lb/hr)	VOC Emissions (T/yr)	HAP Emissions (lb/hr)	HAP Emissions (T/yr)
1,2,4-Trimethylbenzene	95-63-6	0.094	2.96	3.71	na	na
n-Butyl Alcohol	71-36-3	0.026	0.82	1.02	na	na
Xylene (mixed isomers)	1330-20-7	0.017	0.53	0.66	0.53	0.66
Ethyl Benzene	100-41-4	0.004	0.11	0.14	0.11	0.14
Other VOCs	108-67-8	0.178	5.59	6.98	na	na
<b>TOTAL<sup>a</sup></b>		0.3182	10.01	12.52	0.65	0.81

<sup>a</sup>Only non-exempt VOC and HAP components are summed.

<sup>b</sup>Total Orange Paint Usage is 15,000 gal/yr and is divided between Tanks #1 and #2

<sup>c</sup>Maximum potential gallons per hour estimated based on estimated maximum paint usage based on painting records

**DIP TANK 3  
PROPOSED EMISSIONS  
VOC and HAP**

**Max VOC Coating:** New FD Blue- HS Dip  
**Coating ID:** 43-41491C  
**Density (lb/gal):** 10.44  
**Potential Gallons Mixture Applied (gal/yr):** 20,500  
**Max Potential Gallons (gal/hr) <sup>c</sup>:** 3.00

Volatile Component	CAS No.	Max Wt. Fraction	VOC Emissions (lb/hr)	VOC Emissions (T/yr)	HAP Emissions (lb/hr)	HAP Emissions (T/yr)
1,2,4-Trimethylbenzene	95-63-6	0.1000	3.13	10.70	na	na
n-Butyl Alcohol	71-36-3	0.026	0.82	2.81	na	na
Other VOCs <sup>b</sup>		0.190	5.94	20.30	na	na
<b>TOTAL<sup>a</sup></b>		0.316	9.90	33.82	na	na

<sup>a</sup>Only non-exempt VOC and HAP components are summed.

<sup>b</sup>Total volatile wt% from MSDS sheet = 31.6

<sup>c</sup>Maximum potential gallons per hour estimated based on estimated maximum paint usage based on painting records

**YELLOW PAINT  
PROPOSED EMISSIONS  
VOC and HAP**

**Max VOC Coating:** X-9228 MDI Yellow UV Guard  
**Coating ID:** Sheyboygan 43-62028  
**Density (lb/gal):** 10.45  
**Potential Gallons Mixture Applied (gal/yr) <sup>b</sup>:** 4,000  
**Max Potential Gallons (gal/hr) <sup>c</sup>:** 3.00

Volatile Component	CAS No.	Max Wt. Fraction	VOC Emissions (lb/hr)	VOC Emissions (T/yr)	HAP Emissions (lb/hr)	HAP Emissions (T/yr)
1,2,4- Trimethylbenzene	64742-95-6	0.067	2.09	1.39	na	na
Ethyl Benzene	100-41-4	0.002	0.05	0.03	0.047	0.03
Stoddard Solvent	8052-41-3	0.033	1.02	0.68	na	na
Petroleum Naphtha	64742-48-9	0.020	0.61	0.41	na	na
n-Butyl Alcohol	71-36-3	0.010	0.32	0.21	na	na
Unspecified VOC		0.129	4.03	2.69	na	na
<b>TOTAL<sup>a</sup></b>		0.259	8.12	5.42	0.05	0.03

<sup>a</sup>Only non-exempt VOC and HAP components are summed.

<sup>b</sup>Yellow paint is only used once or twice a year and usually in Dip Tank #2

<sup>c</sup>Maximum potential gallons per hour estimated based on estimated maximum paint usage based on painting records

**SOLVENT MIXED IN TANKS  
PROPOSED EMISSIONS  
VOC and HAP**

**Max VOC Coating:** Aromatic 100 Solvent  
**Coating ID:** EQ940652  
**Density (lb/gal):** 7.29  
**Potential Gallons Mixture Applied (gal/yr):** 9,300  
**Potential Gallons (gal/hr):** 1.70

Volatile Component	CAS No.	Max Wt. Fraction	VOC Emissions (lb/hr)	VOC Emissions (T/yr)	HAP Emissions (lb/hr)	HAP Emissions (T/yr)
1,2,4-Trimethylbenzene	95-63-6	0.320	3.97	10.85	na	na
Cumene	98-82-8	0.010	0.12	0.34	0.124	0.34
Xylene	1330-20-7	0.022	0.27	0.75	0.273	0.75
Other VOCs	108-67-8	0.647	8.02	21.93	na	na
<b>TOTAL<sup>a</sup></b>		0.999	12.38	33.86	0.40	1.08

<sup>a</sup>Only non-exempt VOC and HAP components are summed.

## APPENDIX B –APPLICABILITY DETERMINATION EMAIL FROM EPA

**From:** [Madrone.Brook@epamail.epa.gov](mailto:Madrone.Brook@epamail.epa.gov)  
**To:** [Melissa L. Armer](#);  
**Subject:** Re: Applicability of Subpart 6x- Frazier Industrial Company  
**Date:** Tuesday, October 25, 2011 11:56:30 AM  
**Attachments:** [Frazier P-2008.0117 Final PMT.pdf](#)  
[Frazier%20Final%20PTC.pdf](#)  
[Subpart 6X QA april2011.pdf](#)  
[met-fab-6x-applicability.xls](#)

---

Hi Melissa,

In response to your question about the SIC/NAICS codes, since Frazier's SIC/NAICS code 2542/337215 - is not listed in the 6X rule guidance as one of the SIC/NAICS codes that must report under 6X, this facility is exempt.

Re: your question about Frazier facilities in other regions - I would recommend that the facilities in those regions contact EPA to make that determination. In Region 2 the contact is Susan Lancey at 617-918-1656, or [Lancey.Susan@epa.gov](mailto:Lancey.Susan@epa.gov).

Re: the state permit - since these permits often differ from what EPA requires, it is best to contact the state to see if there are additional requirements even though 6X doesn't apply.

Brook Madrone, MN, MPA  
Air Toxics  
EPA Region 10, AWT-107  
1200 6th Ave., Suite 900  
Seattle, WA 98101  
phone: (206) 553-0244  
fax: (206) 553-0110  
[Madrone.Brook@epa.gov](mailto:Madrone.Brook@epa.gov)

<http://www.epa.gov/collisionrepair/> National collision repair  
site & link to final rule

<http://yosemite.epa.gov/R10/AIRPAGE.NSF/Collision+Repair>  
+Campaign/crc-home  
R10 collision repair site  
<http://www.epa.gov/ttn/atw/area/fr23jy08.pdf> Metal fabrication  
rule

<http://www.epa.gov/ttnatw01/gasdist/gasdispg.html> Gas

## APPENDIX C – PROCESSING FEE

In accordance with IDAPA 58.01.01.225, Frazier is subject to \$1,000 PTC processing fee.

<b>Emissions Inventory</b>			
Pollutant	Annual Emissions Increase (T/yr)	Annual Emissions Reduction (T/yr)	Annual Emissions Change (T/yr)
NO <sub>x</sub>	0.0	0	0.0
SO <sub>2</sub>	0.0	0	0.0
CO	0.0	0	0.0
PM10	0.0	0	0.0
VOC	0.0	-0.2	-0.2
TAPS/HAPS <sup>a</sup>	0.0	-0.5	-0.5
<b>Total:</b>	<b>0.0</b>	<b>-0.7</b>	<b>-0.7</b>
<b>Fee Due</b>	<b>\$ 1,000.00</b>		

<sup>a</sup> TAP and VOC emissions decrease is likely double counted. But that does not affect the amount of PTC processing fee.