



Louisville Metro Air Pollution Control District
 850 Barret Avenue
 Louisville, Kentucky 40204-1745



Federally Enforceable District Origin Operating Permit (FEDOOP)

Permit No.: O-0481-15-F

Plant ID: 0481

Effective Date: 00/00/2015

Expiration Date: 00/00/2020

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

Service Welding & Machine Co. LLC
 700 E. Main Street & 175 N. Wenzel Street
 Louisville, Kentucky 40202 & 40206

The applicable procedures of District Regulation 2.17 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than twelve (12) months and no later than ninety (90) days prior to the expiration date.

Emission limitations to qualify for non-major status:

Pollutant:	PM ₁₀	VOC	Total HAP	Single HAP
Tons/year:	<25	<25	<12.5	<5

Application No.:	13069	Application Received:	04/21/2008
	42749		09/16/2008
	13981		02/16/2010
	63575		04/03/2014

Permit Writer: Eva Addison

Date of Public Notice: 11/18/2015

{Manager1}
 Air Pollution Control Officer
 {date1}

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FEDOOP Permit Revisions/Changes

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
Initial	134-03-F.	07/30/2003	06/08/2003	Initial	Entire Permit	Initial Permit Issuance for Plant ID 481 (175 N. Wenzel St.)
Initial	136-03-F	07/30/2003	06/08/2006	Initial	Entire Permit	Initial Permit Issuance for Plant ID 707 (700 E. Main St)
N/A	O-0481-15-F	0x/0x/2015	11/18/2015	Renewal	Entire Permit	Scheduled permit renewal; Combining FEDOOP permits for ID 481 & 707 into one permit; and adding insignificant activities for ID 707

Construction Permit History:

Permit No.	Issue Date	Description
141-98-C(R1) for 175 N Wenzel Street	5/31/2010	One (1) Venus HIS fiberglass chop spray system for coating exterior of steel tanks. System uses chopped fiberglass material with a polyester resin containing styrene monomer
4-80-C(R1) for 700 E Main Street	5/31/2010	One (1) Paint Room with five (5) spray gun, Graco, for applying paint and epoxy to steel tanks

Abbreviations and Acronyms

AP-42	- AP-42, <i>Compilation of Air Pollutant Emission Factors, published by U.S.EPA</i>
APCD	- Louisville Metro Air Pollution Control District
BAC	- Benchmark Ambient Concentration
BACT	- Best Available Control Technology
Btu	- British thermal unit
CEMS	- Continuous Emission Monitoring System
CFR	- Code of Federal Regulations
CO	- Carbon monoxide
District	- Louisville Metro Air Pollution Control District
EA	- Environmental Acceptability
gal	- U.S. fluid gallons
GHG	- Greenhouse Gas
HAP	- Hazardous Air Pollutant
HCl	- Hydrogen chloride
Hg	- Mercury
hr	- Hour
in.	- Inches
lbs	- Pounds
l	- Liter
LMAPCD	- Louisville Metro Air Pollution Control District
mmHg	- Millimeters of mercury column height
MM	- Million
NAICS	- North American Industry Classification System
NO _x	- Nitrogen oxides
PM	- Particulate Matter
PM ₁₀	- Particulate Matter less than 10 microns
PM _{2.5}	- Particulate Matter less than 2.5 microns
ppm	- parts per million
PSD	- Prevention of Significant Deterioration
psia	- Pounds per square inch absolute
QA	- Quality Assurance
RACT	- Reasonably Available Control Technology
SIC	- Standard Industrial Classification
SIP	- State Implementation Plan
SO ₂	- Sulfur dioxide
STAR	- Strategic Toxic Air Reduction
TAC	- Toxic Air Contaminant
UTM	- Universal Transverse Mercator
VOC	- Volatile Organic Compound
w.c.	- Water column
year	- Any period of twelve consecutive months, unless "calendar year" is specified
yr	- Year, or any 12 consecutive-month period, as determined by context

Preamble

This permit covers only the provisions of Kentucky Revised Statutes Chapter 77 Air Pollution Control, the regulations of the Louisville Metro Air Pollution Control District (District) and, where appropriate, certain federal regulations. The issuance of this permit does not exempt any owner or operator to whom it has been issued from prosecution on account of the emission or issuance of any air contaminant caused or permitted by such owner or operator in violation of any of the provisions of KRS 77 or District regulations. Any permit shall be considered invalid if timely payment of annual fees is not made. The permit contains general permit conditions and specific permit conditions. General conditions are applicable unless a more stringent requirement is specified elsewhere in the permit.

General Conditions

1. The owner or operator shall comply with all General Conditions herein and all terms and conditions in the referenced process/process equipment list.
2. All terms and conditions in this FEDOOP are enforceable by EPA, except those terms and conditions specified as District-only enforceable, and those which are not required pursuant to the Clean Air Act Amendments of 1990 (CAAA) or any of the Act's applicable requirements.
3. All application forms, reports, compliance certifications, and other relevant information submitted to the District shall be certified by a responsible official. If a change in the responsible official (RO) occurs during the term of this permit, or if an RO is added, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days of such change or addition.
4. The owner or operator shall submit an annual compliance certification, signed by the responsible official, to the District, on or before April 15 of the year following the year for which the certification applies. This certification shall include completion of District Form 9440-O.
5. Periodic testing, instrumental monitoring, or non-instrumental monitoring, which may include record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstrating continuing compliance with the terms and conditions of this permit.
6. The owner or operator shall retain all records required by the District or any applicable requirement, including all required monitoring data and supporting information, for a period of five years from the date of the monitoring, sampling, measurement, report, or application, unless a longer time period for record retention is required by the District or an applicable requirement. Records shall be retrievable within a reasonable time and made available to the District, Kentucky Division for Air Quality, or the EPA upon request.
7. The owner or operator shall provide written notification to the District, and receive approval, prior to making any changes to existing equipment or processes that would result in emissions of any regulated pollutant in excess of the allowable emissions specified in this permit.
8. This permit may be reissued, revised, reopened, or revoked pursuant to District Regulation 2.17. Repeated violations of permit conditions are sufficient cause for revocation of this permit. The filing of a request by the owner or operator for any reissuance, revision, revocation, termination, or a notification of planned changes in equipment or processes, or anticipated noncompliance shall not alter any permit requirement.
9. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed either 10 tons per year, or such lesser quantity as

the EPA has established by rule, of any one Hazardous Air Pollutant (HAP) or 25 tons per year of all HAPs combined. Fugitive HAP emissions shall be included in this limit. HAPs are listed in Section 112(b) of the CAAA and as amended in 40 CFR 63, Subpart C.

10. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed 100 tons per year of any regulated pollutant, including particulate matter, PM₁₀, PM_{2.5}, sulfur dioxide, carbon monoxide, nitrogen oxides, lead, hydrogen sulfide, gaseous fluorides, total fluorides, or Volatile Organic Compounds (VOC); any pollutant subject to any standard in District Regulation 7.02; any substance listed in sections 112(r), 602(a) and 602(b) of the CAAA; or any combination of greenhouse gasses whose combined global warming potential equals or exceeds 100,000 tons CO₂-equivalent, as defined in 40 CFR 98. Fugitive emissions shall be included in these limits for source categories listed in District Regulation 2.16.
11. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month.
12. Unless specified elsewhere in this permit, the owner or operator shall submit annual reports demonstrating compliance with the emission limitations specified. The report shall contain monthly and consecutive 12-month totals for each pollutant that has a federally enforceable limitation on the potential to emit. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement or a declaration that there were no such deviations. All annual compliance reports shall include the following per Regulation 2.17, section 3.5.
 - A certification statement: "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete", and
 - The signature and title of a responsible official of the company.

The report must be postmarked no later than March 1 of the year following the calendar year covered in the annual report.

13. The owner or operator shall comply with all applicable requirements of the following federally enforceable District Regulations:

Regulation	Title
1.01	General Application of Regulations and Standards
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance with Emissions Standards and Maintenance Requirements
1.06	Source Self-Monitoring, Emissions Inventory Development and Reporting
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions
1.08	Administrative Procedures

Regulation	Title
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions
2.01	General Application (Permit Requirements)
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements
2.07	Public Notification for Title V, PSD, and Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Modification, Revocation, or Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
2.17	Federally Enforceable District Origin Operating Permits
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.07	Episode Reporting Requirements
6.01	General Provisions
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions

14. The owner or operator shall comply with all applicable requirements of the following District-only enforceable regulations:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors in the Ambient Air
2.08	Fees
5.00	Definitions
5.01	General Provisions
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
5.14	Hazardous Air Pollutants and Source Categories
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants
7.02	Adoption of Federal New Source Performance Standards

15. The owner or operator shall submit emission inventory reports, as required by Regulation 1.06, if so notified by the District.
16. The owner or operator shall submit timely reports of abnormal conditions or operational changes that may cause excess emissions, as required by Regulation 1.07.
17. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit shall be submitted to:

***Air Pollution Control District
Room 205
850 Barret Ave
Louisville, KY 40204-1745***

Emission Unit Plant-wide Specific Conditions for Both 175 N. Wenzel St. and 700 E. Main St. combined

S1. Standards (Regulation 2.17, section 5.1)¹

a. PM₁₀

- i. The owner or operator shall not allow or cause total plant-wide PM₁₀ emissions to exceed 25 tons during any consecutive 12-month period.² (Regulation 5.00, section 1.13.5.1)
- ii. For the paint booth (located at 700 E. Main), the abrasive blast room (located at 700 E. Main), and the Venus HIS fiberglass chop spray system (located at 175 N. Wenzel): The owner or operator shall operate and maintain the control device at all times the equipment listed above are in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice to meet the standards.

b. HAP

- i. The owner or operator shall not allow or cause plant-wide total combined HAPs emission to exceed 12.5 tons during any consecutive 12-month period.³
- ii. The owner or operator shall not allow or cause plant-wide each single HAP emission to exceed 5 tons during any 12 month consecutive period.
- iii. The owner or operator shall limit the hours of operation of the paint booth (located at 700 E. Main) to 3,030 hours during any consecutive 12-month period or less.⁴

¹ The source requested 25 tons/yr for PM₁₀ and VOC, 12.5 tons/yr Total HAPs, and 5 tons/yr single HAP as FEDOOP limits and to avoid being subject to the District STAR regulations.

² Utilizing District approved control efficiencies of 95% for the baghouse on the abrasive blast room located at 700 E. Main and 90% for the filters on the paint booth located at 700 E. Main and the fiberglass spray system located at 175 N. Wenzel, the PM₁₀ potential emissions will be 24.857 tpy, demonstrating compliance with the <25 tpy. The blasting equipment located at 175 N. Wenzel is not controlled. The plant-wide PM₁₀ emissions will need to be calculated monthly.

³ Utilizing the hours of operation limit on the paint booth and the resin usage limit will ensure the combined HAPs are below 12.5 ton/yr. Since each will ensure each single HAP (xylene and styrene) will be less than 5 tons/yr.

⁴ The 3,030 hours of operation of the paint booth will reasonably ensure the single HAP (Xylene) emissions less than 5 tons per year. Therefore the company is not required to calculate the HAP emissions in order to demonstrate compliance with the HAP emission limits if compliance with the hours of operation limit is met.

- iv. The owner or operator shall not use or apply more than 164,000 pounds of styrene based resin during any consecutive 12-month period in the Venus HIS fiberglass chop spray system (located at 175 N. Wenzel).⁵

c. **VOC**

The owner or operator shall not allow or cause total plant-wide VOC emissions to exceed 25 tons during any consecutive 12-month period.¹ (Regulation 5.00, section 1.13.5.1)

S2. **Monitoring and Record Keeping** (Regulation 2.17, section 5.2)

The owner or operator shall maintain the following records for a minimum of five (5) years and make the records readily available to the District upon request.

a. **PM₁₀**

- i. The owner or operator shall, monthly, maintain records of the name, quantity used for each coating, and solvent.
- ii. The owner or operator shall, monthly, maintain records of the quantity of resin used.
- iii. The owner or operator shall, daily, maintain hours of operation of the abrasive blast room (located at 700 E. Main) and the ALC Sandy Jet sandblaster (located at 175 N. Wenzel).
- iv. For the paint booth (located at 700 E. Main), the abrasive blast room (located at 700 E. Main), and the Venus HIS fiberglass chop spray system (located at 175 N. Wenzel): The owner or operator shall maintain daily records of any periods of time where the process was operating and the control device was not operating. If no bypass activities occurred during a calendar month, the owner or operator shall maintain a declaration that the control device operated at all times that month when the process was operating. The record for each bypass event shall include the following:
 - 1) Date;
 - 2) Start time and stop time;
 - 3) Identification of the control device and process equipment;
 - 4) PM₁₀ emissions for during bypass period; (See Comment 6)
 - 5) Summary of the cause or reason for each bypass event;
 - 6) Corrective action taken to minimize the extent or duration of the bypass event; and
 - 7) Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event.

⁵ Based on the annual usage limit of 164,000 pounds of resin, the percent by weight styrene limit (49%), and an emission factor of 121 lbs of styrene emitted per ton of resin applied, the VOC/single HAP (styrene) emissions are less than 5 tons per year. To streamline the permit requirements, the annual styrene usage and associated compliance monitoring requirements will serve as a surrogate to limit the VOC and HAP emissions.

- v. The uncontrolled PM/PM₁₀ emissions during the bypass period shall be calculated using the following equations unless another method is approved in writing by the District:

Paint booth (700 E. Main):

$$\text{PM (ton)} = (\text{paint usage, gal}) (\text{paint density, lb/gal}) (\text{solid content, \%}) \\ (1 - \text{transfer efficiency, 65\%}) / (2000, \text{ lb/ton})$$

$$\text{PM}_{10} = \text{PM}$$

Abrasive blast room (700 E. Main):

$$\text{PM (ton)} = (\text{operating time, hr}) (\text{capacity, 11,760 lb abrasive/hr}) (\text{emission factor,} \\ 6.48 \text{ lb/ 1000 lb abrasive}) / (2000, \text{ lb/ton})$$

$$\text{PM}_{10} (\text{ton}) = (\text{operating time, hr}) (\text{capacity, 11,760 lb abrasive/hr}) (\text{emission factor,} \\ 3.12 \text{ lb/ 1000 lb abrasive}) / (2000, \text{ lb/ton})$$

Venus HIS fiberglass chop spray system (175 N. Wenzel):

$$\text{PM (ton)} = (\text{resin usage, lbs}) (10\% \text{ solid}) (1 - \text{transfer efficiency, 65\%}) / (2000, \\ \text{ lb/ton})$$

$$\text{PM}_{10} = \text{PM}$$

- vi. For the paint booth (located at 700 E. Main), the abrasive blast room (located at 700 E. Main), the ALC Sandy Jet sandblaster (located at 175 N. Wenzel), and the Venus HIS fiberglass chop spray system (located at 175 N. Wenzel): The owner or operator shall, monthly, calculate and record the monthly and 12 consecutive month PM₁₀ emissions for each month in the report period. The PM₁₀ emissions shall be calculated using the following equations unless another method is approved in writing by the District:

Paint booth (700 E. Main):

$$\text{PM (ton)} = (\text{paint usage, gal, month}) (\text{paint density, lb/gal}) (\text{solid content, \%}) \\ (1 - \text{transfer efficiency, 65\%}) (1 - \text{control efficiency, 90\%}) / (2000, \text{ lb/ton})$$

$$\text{PM}_{10} = \text{PM}$$

Abrasive blast room (700 E. Main):

$$\text{PM}_{10} (\text{ton}) = (\text{operating time, hr/month}) (\text{capacity, 11,760 lb abrasive/hr}) (\text{emission} \\ \text{factor, 3.12 lb/ 1000 lb abrasive}) (1 - \text{control efficiency, 95\%}) / (2000, \text{ lb/ton})$$

ALC Sandy Jet sandblaster (175 N. Wenzel):

$$\text{PM}_{10} (\text{ton}) = (\text{operating time, hr/month}) (\text{capacity, 100 lb abrasive/hr}) (\text{emission} \\ \text{factor, 3.12 lb/ 1000 lb abrasive}) / (2000, \text{ lb/ton})$$

Venus HIS fiberglass chop spray system (175 N. Wenzel):

$$\text{PM (ton)} = (\text{resin usage, lbs}) (10\% \text{ solid}) (1 - \text{transfer efficiency, 65\%}) (1 - \text{control} \\ \text{efficiency, 90\%}) / (2000, \text{ lb/ton})$$

$$\text{PM}_{10} = \text{PM}$$

- vii. The owner or operator shall, monthly, account for the minor PM₁₀ emissions from Insignificant Activities when totaling the monthly plant-wide emissions. Since the emissions are minor the owner or operator may use the potential PM₁₀ emissions as the monthly emissions.

- 1) District calculated PM₁₀ PTE for the two plasma cutting tables combined is 61.67 pound/month.
 - 2) District calculated PM₁₀ PTE for 23 welding unit combined is 35 pounds per month.
 - 3) District calculated PM₁₀ PTE for 10 machining equipment combined is 33.33 pounds per month.
- viii. The owner or operator shall, monthly, sum the Total PM₁₀ emissions from controlled and uncontrolled emissions utilizing the methodologies above for each month.

b. HAP

- i. For the paint booth (located at 700 E. Main):
 - 1) The owner or operator shall, monthly, maintain records of the name, quantity used, and HAP content of each HAP containing material used during each calendar month and consecutive 12-month period.
 - 2) The owner or operator shall, daily, maintain records of the hours of operation.
 - 3) If the hours of operation of the paint booth exceed 3,030 hours during any 12-consecutive month period, the owner or operator shall calculate and record the monthly and 12 consecutive month period individual and total HAP emissions for the paint booth.
- ii. For the Venus HIS fiberglass chop spray system (175 N. Wenzel):
 - 1) The owner or operator shall, monthly, record the total amount used in pounds of resin in order to demonstrate compliance with the 12-month period material usage limit.
 - 2) If the usage rate of styrene based resin exceeds 164,000 pounds during any 12-consecutive month period, the owner or operator shall calculate the 12-consecutive month period to date HAP emissions and subsequently calculate the monthly and 12-consecutive month period to date HAP emissions each month for the remainder of the 12-consecutive month period.
- iii. The HAP emissions shall be calculated using the following equations, unless another method is approved in writing by the District:

Paint booth (700 E. Main):

$$\text{HAP (ton)} = (\text{paint usage, gal})(\text{density, lb/gal})(\text{HAP content, \%})/(2000, \text{ lb/ton})$$

Venus HIS fiberglass chop spray system (175 N. Wenzel):

$$\text{HAP (ton)} = (\text{resin usage, lbs})(121 \text{ lbs styrene}/2000 \text{ lbs resin})/(2000, \text{ lb/ton})$$

- iv. The owner or operator shall, monthly, account for the minor total HAP emissions from Insignificant Activities when totaling the monthly plant-wide emissions. Since the emissions are minor the owner or operator may use the potential total HAP emissions as the monthly emissions.
 - 1) District calculated total HAP PTE for the 550 gallon gasoline storage tank and refueling pump combined is 12.67 pound/month.
 - 2) District calculated total HAP PTE for 23 welding unit combined is 2.33 pounds per month.
 - 3) District calculated total HAP PTE for 10 machining equipment combined is 2.17 pounds per month.
- v. The owner or operator shall, monthly, sum the Total HAP emissions from the uncontrolled emissions utilizing the methodologies above for each month.
- vi. The owner or operator shall maintain a copy of the material safety data sheet (MSDS) for each HAP containing material used at this plant.

c. VOC

- i. For the paint booth (located at 700 E. Main):
 - 1) The owner or operator shall, monthly, maintain records of the name, quantity used, and VOC content of each VOC containing material used during each calendar month and consecutive 12-month period.
 - 2) The owner or operator shall, daily, maintain records of the hours of operation.
 - 3) If the hours of operation of the paint booth exceed 3,030 hours during any 12-consecutive month period, the owner or operator shall calculate and record the monthly and 12-consecutive month period VOC emissions for the paint booth.
- ii. For the Venus HIS fiberglass chop spray system (175 N. Wenzel):
 - 1) The owner or operator shall, monthly, record the total amount used in pounds of resin in order to demonstrate compliance with the 12-month period material usage limit.

- 2) If the usage rate of styrene based resin exceeds 164,000 pounds during any 12-consecutive month period, the owner or operator shall calculate the 12-consecutive month period to date VOC emissions and subsequently calculate the monthly and 12-consecutive month period to date VOC emissions each month for the remainder of the 12-consecutive month period.
- iii. The VOC emissions shall be calculated using the following equations, unless another method is approved in writing by the District:

Paint booth (700 E. Main):

$$\text{VOC (ton)} = (\text{paint usage, gal})(\text{density, lb/gal})(\text{VOC content, \%}) / (2000, \text{ lb/ton})$$

Venus HIS fiberglass chop spray system (175 N. Wenzel):

$$\text{VOC (ton)} = (\text{resin usage, lbs})(121 \text{ lbs styrene} / 2000 \text{ lbs resin}) / (2000, \text{ lb/ton})$$

- iv. The owner or operator shall, monthly, account for the minor total VOC emissions from Insignificant Activities when totaling the monthly plant-wide emissions. Since the emissions are minor the owner or operator may use the potential VOC emissions as the monthly emissions.
 - 1) District calculated VOC PTE for the 550 gallon gasoline storage tank and refueling pump combined is 241.67 pound/month.
 - 2) District calculated VOC PTE for the 500 gallon diesel storage tank is 1.67 pound/month.
- v. The owner or operator shall, monthly, sum the VOC emissions from the uncontrolled emissions utilizing the methodologies above for each month.
- vi. The owner or operator shall maintain a copy of the material safety data sheet (SDS) for each VOC containing material used at this plant.

S3. Reporting (Regulation 2.17, section 5.2)

The following information shall be included in the annual compliance report required by General Condition #12.

a. **PM₁₀**

- i. For the paint booth (located at 700 E. Main), the abrasive blast room (located at 700 E. Main), and the Venus HIS fiberglass chop spray system (located at 175 N. Wenzel): The owner or operator shall report the following information regarding PM₁₀ By-Pass Activity in the annual compliance report:
 - 1) Number of times the PM vent stream by-passes the control device and is vented to the atmosphere;
 - 2) Duration of each by-pass to the atmosphere; and

- 3) Calculated quantity of tons of PM₁₀ emitted for each by-pass.
 - 4) A negative declaration if no by-passes occurred.
- ii. If any bypass activities occurred during the reporting period, the owner or operator shall report the total PM₁₀ emissions from the paint booth (located at 700 E. Main), the abrasive blast room (located at 700 E. Main), the Venus HIS fiberglass chop spray system (located at 175 N. Wenzel), ALC Sandy Jet sandblaster (located at 175 N. Wenzel), and all the Insignificant Activities to demonstrate compliance with the PM₁₀ limits as specified in Specific Condition S1.a.i.

b. HAP

- i. For the paint booth (located at 700 E. Main):
- 1) The owner or operator shall report any deviations from the 3,030 hours of operation limit. If no deviations occur during the reporting period, the report shall contain a negative declaration.
 - 2) If the hours of operation of the equipment exceed 3,030 hours during any 12-consecutive month period, the owner or operator shall report the emissions, during each calendar month and each consecutive 12-month period for each month, for individual HAP and total HAPs combined from both Plants, 700 E Main and 175 N. Wenzel including the Insignificant Activities.
- ii. For the Venus HIS fiberglass chop spray system (175 N. Wenzel):
- 1) The owner or operator shall report the amount of resin applied, in pounds, during each calendar month and each consecutive 12-month period for each month in the reporting period.
 - 2) If the usage rate of styrene based resin exceeds 164,000 pounds during any 12-consecutive month period, the owner or operator shall report the HAP emissions , during each calendar month and each consecutive 12-month period for each month, for individual HAP and total HAPs combined from both Plants, 700 E Main and 175 N. Wenzel including the Insignificant Activities.

c. VOC

- i. For the paint booth (located at 700 E. Main):
- 1) The owner or operator shall report any deviations from the 3,030 hours of operation limit. If no deviations occur during the reporting period, the report shall contain a negative declaration.

- 2) If the hours of operation of the equipment exceed 3,030 hours during any 12-consecutive month period, the owner or operator shall report the emissions, during each calendar month and each consecutive 12-month period for each month, for VOCs combined from both Plants, 700 E Main and 175 N. Wenzel including the Insignificant Activities.
- ii. For the Venus HIS fiberglass chop spray system (175 N. Wenzel):
- 1) The owner or operator shall report the amount of resin applied, in pounds, during each calendar month and each consecutive 12-month period for each month in the reporting period.
 - 2) If the usage rate of styrene based resin exceeds 164,000 pounds during any 12-consecutive month period, the owner or operator shall report the VOC emissions, during each calendar month and each consecutive 12-month period for each month, for VOCs combined from both Plants, 700 E Main and 175 N. Wenzel including the Insignificant Activities.

Plant wide Comment

The District has determined that the two plants (700 E. Main Street and 175 N. Wenzel Street) are a single source for purposes of determining Major Source applicability based on the criteria established by the USEPA.

USEPA used the following criteria for single source determination for Major Sources. A source must meet all three criterial.

- Same Industrial Grouping (same first two digit SIC code) and,
- Common ownership or control,and
- Contiguous or Adjacent

Both plants meet all three criteria.

Emission Unit U1: Equipment Located at 175 N. Wenzel St.**U1 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.17	Federally Enforceable District Origin Operating Permits	All
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants	1 - 4
7.08	Standards of Performance for New Process Operations	All
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	All
40 CFR 63 Subpart XXXXXX	National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories	63.11514, 63.11515, 63.11516, 63.11519

U1 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
E1	One (1) Venus HIS fiberglass chop spray system for coating exterior of steel tanks. System uses chopped fiberglass material with a polyester resin containing styrene monomer	7.08; 7.25	C1	S1	1991
E2	One (1) ALC Sandy Jet sandblaster, model F-100-DM	7.08; 40 CFR 63 Subpart XXXXXX	N/A	N/A	1991

U1 Control Devices:

Control ID	Description	Control Efficiency	Performance Indicator	Stack ID
C1	Filters	90%	Monthly Filter Inspections	S1

U1 Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. VOC

- i. The owner or operator shall not use or apply more than 164,000 pounds of styrene based resin during any consecutive 12-month period unless compliance with Specific Condition S2.a.ii is met. (Regulation 7.25, section 3) (Construction Permit 141-98-C(R1) effective 5/31/2010)⁶
- ii. The owner or operator shall not allow or cause VOC emissions from emission point E1 (Venus HIS-fiberglass chop spray system) or any new equipment added to exceed 5 tons during any consecutive 12-month period. (Regulation 7.25, section 3) (Construction Permit 141-98-C(R1) effective 5/31/2010)

b. PM/PM₁₀

- i. For emission point E1 (Venus HIS fiberglass chop spray system):⁷
 - 1) The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr, based on actual operating hours in a calendar day. (Regulation 7.08, section 3.1.2)
 - 2) The owner or operator shall operate and maintain the control device at all times the equipment listed above are in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice to meet the standards.
- ii. For emission point E2 (ALC Sandy Jet sandblaster): The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr, based on actual operating hours in a calendar day. (Regulation 7.08, section 3.1.2)⁸
- iii. See the Plant wide emission unit for additional PM₁₀ requirements.

⁶ Based on the annual usage limit of 164,000 pounds of resin, the percent by weight styrene limit (49%), and an emission factor of 121 lbs of styrene emitted per ton of resin applied, the VOC emissions are less than 5 tons per year. To streamline the permit requirements, the annual styrene usage and associated compliance monitoring requirements will serve as a surrogate to limit the VOC and HAP emissions.

⁷ Using the minimum spray gun transfer efficiency of 65%, the percent solids of the material (10%), the material usage rate (426 lb/hr), and the efficiency of the filters (90%), the lb/hr PM emission limit can be exceeded uncontrolled, but cannot be exceeded controlled by the dry filters.

⁸ Using a maximum usage rate of 100 lb/hr of abrasive blasting media and an emission factor of 13 lb PM per 1,000 pounds of blasting media, the potential uncontrolled PM emissions are below the lb/hr PM emission standard, therefore there are no monitoring, record keeping or reporting requirements related to the lb/hr emission limit.

c. **Opacity**

For both emission point E1 (Venus HIS fiberglass chop spray system) and emission point E2 (ALC Sandy Jet sandblaster): The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

d. **HAP**

i. For emission point E2 (ALC Sandy Jet sandblaster):

1) The owner or operate shall implement management practices to minimize emissions of MFHAP as specified in paragraph (a)(3)(i) of 40 CFR 63.11516 instead of the practices required by paragraph (a)(2) of 40 CFR.63.1156. The owner or operator shall demonstrate that management practices are being implemented by complying with the requirements in paragraphs (a)(3)(ii) through (iv) of 40 CFR 63.11516. (40 CFR 63.11516(a)(3))

(a) Management practices for dry abrasive blasting of objects greater than 8 feet (2.4 meters) in any one dimension are specified in paragraphs (a)(3)(i)(A) through (E) of this section. (40 CFR 63.11516(a)(3)(i))

(i) The owner or operator shall take measures necessary to minimize excess dust in the surrounding area to reduce MFHAP emissions, as practicable; and (40 CFR 63.11516(a)(3)(i)(A))

(ii) The owner or operator shall enclose abrasive material storage areas and holding bins, seal chutes and conveyors that transport abrasive material; and (40 CFR 63.11516(a)(3)(i)(B))

(iii) The owner or operator shall operate all equipment associated with dry abrasive blasting operations according to manufacturer's instructions; and (40 CFR 63.11516(a)(3)(i)(C))

(iv) The owner or operator shall not re-use dry abrasive blasting media unless contaminants (i.e., any material other than the base metal, such as paint residue) have been removed by filtration or screening, and the abrasive material conforms to its original size; and (40 CFR 63.11516(a)(3)(i)(D))

(v) Whenever practicable, the owner or operator shall switch from high particulate matter (PM)-emitting blast media (e.g., sand) to low PM-emitting blast

media (e.g., crushed glass, specular hematite, steel shot, aluminum oxide), where PM is a surrogate for MFHAP. (40 CFR 63.11516(a)(3)(i)(E))

- ii. See the Plant wide emission unit.

S2. Monitoring and Record Keeping (Regulation 2.17, section 5.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. VOC

- i. The owner or operator shall, monthly, record the total amount used in pounds of resin in order to demonstrate compliance with the monthly and 12 consecutive month period material usage limits.
- ii. If the usage rate of styrene based resin exceeds 164,000 pounds per 12 consecutive month period, the owner or operator shall calculate the year to date VOC emissions and subsequently calculate the monthly and 12 consecutive month VOC emissions each month for the remainder of the calendar year.

b. PM/PM₁₀

- i. For emission point E1 (Venus HIS fiberglass chop spray system): The owner or operator shall maintain daily records of any periods of time where the process was operating and the control device was not operating or a declaration that the control device operated at all times that day when the process was operating. The record for each bypass event shall include the following:
 - 1) Date;
 - 2) Start time and stop time;
 - 3) Identification of the control device and process equipment;
 - 4) PM emissions for each hour during the bypass in lb/hr during bypass period, utilizing the calculation methodology in the plant wide emission unit;
 - 5) Summary of the cause or reason for each bypass event;
 - 6) Corrective action taken to minimize the extent or duration of the bypass event; and
 - 7) Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event.

- ii. There are no monitoring or record keeping requirements for emission point E2 (ALC Sandy Jet sandblaster) related to the lb/hr PM emission standard.
- iii. See the Plant wide emission unit for additional PM₁₀ requirements.

c. **Opacity**

- i. For emission point E1 (Venus HIS fiberglass chop spray system): The owner or operator shall inspect the filter system at least monthly to ensure proper installment (i.e. proper alignment/placement, gaps, etc.) and replace as needed.
- ii. For emission point E1 (Venus HIS fiberglass chop spray system): The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters and if filters were replaced.
- iii. For emission point E2 (ALC Sandy Jet sandblaster): See Specific Condition S2.d.i.

d. **HAP**

- i. For emission point E2 (ALC Sandy Jet sandblaster):
 - 1) The owner or operator shall perform visual determinations of fugitive emissions, as specified in paragraph 40 CFR 63.11517(b), "What are my monitoring requirements?", according to paragraphs (a)(3)(ii)(A) of 40 CFR 63.11516. (40 CFR 63.11516(a)(3)(ii))
 - (a) For abrasive blasting of objects greater than 8 feet (2.4 meters) in any one dimension that is performed outdoors, The owner or operator shall perform visual determinations of fugitive emissions at the fenceline or property border nearest to the outdoor dry abrasive blasting operation. (40 CFR 63.11516(a)(3)(ii)(A))
 - (b) Visual determination of fugitive emissions must be performed according to the procedures of EPA Method 22, of 40 CFR part 60, Appendix A-7. The owner or operator shall 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. (40 CFR 63.11517(a))

- (c) Visual determinations of fugitive emissions must be performed in accordance with paragraph (a) of 40 CFR 63.11517 and according to the schedule in paragraphs (b)(1) through (4) of 40 CFR 63.11517. (40 CFR 63.11517(b))
- (i) Perform visual determination of fugitive emissions once per day, on each day the process is in operation, during operation of the process. (40 CFR 63.11517(b)(1))
 - (ii) If no visible fugitive emissions are detected in consecutive daily EPA Method 22 tests, performed in accordance with paragraph (b)(1) of 40 CFR 63.1157 for 10 days of work day operation of the process, the owner or operator 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 owner or operator shall resume EPA Method 22 testing of that operation once per day during each day that the process is in operation, in accordance with paragraph (b)(1) of 40 CFR 63.1157. (40 CFR 63.11517(b)(2))
 - (iii) If no visible fugitive emissions are detected in four consecutive weekly EPA Method 22 tests performed in accordance with paragraph (b)(2) of 40 CFR 63.1157, the owner or operator 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 owner or operator shall resume weekly EPA Method 22 in accordance with paragraph (b)(2) of 40 CFR 63.1157. (40 CFR 63.11517(b)(3))
 - (iv) If no visible fugitive emissions are detected in three consecutive monthly EPA Method 22 tests performed in accordance with paragraph (b)(3) of 40 CFR 63.1157, the owner or operator 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 owner or operator shall resume monthly EPA Method 22 in accordance with paragraph (b)(3) of 40 CFR 63.1157. (40 CFR 63.11517(b)(4))

- 2) The owner or operator shall keep a record of all visual determinations of fugitive emissions along with any corrective action taken in accordance with the requirements in 40 CFR 63.11519(c)(2), “What are my notification, recordkeeping, and reporting requirements?” (40 CFR 63.11516(a)(3)(iii))
 - (a) Maintain a record of the information specified in paragraphs (c)(2)(i) through (iii) of 40 CFR 63.11519 for each affected source which performs visual determination of fugitive emissions in accordance with 40 CFR 63.11517(a), “Monitoring requirements.” (40 CFR 63.11519(c)(2))
 - (i) The date and results of every visual determination of fugitive emissions; (40 CFR 63.11519(c)(2)(i))
 - (ii) A description of any corrective action taken subsequent to the test; and (40 CFR 63.11519(c)(2)(ii))
 - (iii) The date and results of any follow-up visual determination of fugitive emissions performed after the corrective actions. (40 CFR 63.11519(c)(2)(iii))
- 3) If visible fugitive emissions are detected, the owner or operator shall perform corrective actions until the visible fugitive emissions are eliminated, at which time the owner or operator shall comply with the requirements in paragraphs (a)(3)(iv)(A) and (B) of 40 CFR 63.11516. (40 CFR 63.11516(a)(3)(iv))
 - (a) The owner or operator shall perform a follow-up inspection for visible fugitive emissions in accordance with 40 CFR 63.11517(a), “Monitoring Requirements.” (40 CFR 63.11516(a)(3)(iv)(A))
- 4) If you comply with this subpart by operating any equipment according to manufacturer's instruction, you must keep these instructions readily available for inspector review. (40 CFR 63.11519(c)(13))
- 5) The owner or operator shall maintain records according to the following requirements. (40 CFR 63.11519(c)(15))
 - (a) Records shall be in a form suitable and readily available for expeditious review. Where appropriate, the records shall be maintained as electronic spreadsheets or in a database. (40 CFR 63.11519(c)(15)(i))

- (b) Records shall be retained for five (5) years following the date of each occurrence, measurement, corrective action, report, or record. (40 CFR 63.11519(c)(15)(ii))
- (c) Records shall be retained on-site for at least two (2) years after the date of each occurrence, measurement, corrective action, report, or record. The owner or operator may choose to keep the records off-site for the remaining three (3) years. (40 CFR 63.11519(c)(15)(iii))

ii. See the Plant wide emission unit.

S3. Reporting (Regulation 2.17, section 5.2)

a. VOC

- i. The owner or operator shall report the amount of resin applied, in pounds, during each calendar month and each consecutive 12-month period for each month in the reporting period.
- ii. If the usage rate of styrene based resin exceeds 164,000 pounds per 12 consecutive month period, the owner or operator shall report the VOC emissions for each month during each consecutive 12-month period in the reporting period.

b. PM/PM₁₀

- i. For emission point E1 (Venus HIS fiberglass chop spray system): The owner or operator shall identify all periods of exceeding PM lb/hr emission standards during a reporting period. The report shall include the following:
 - 1) Emission point ID number;
 - 2) The date and duration (including the start and stop time) during which a deviation occurred;
 - 3) The quantity of excess emissions;
 - 4) Summary information on the cause or reason for excess emissions;
 - 5) Corrective action taken to minimize the extent and duration of each excess emissions event;
 - 6) Measures implemented to prevent reoccurrence of the situation that resulted in excess PM emissions;
 - 7) If no deviations occur during the annual reporting period, the report shall contain a negative declaration
- ii. There are no reporting requirements for emission point E2 (ALC Sandy Jet sandblaster) related to the lb/hr PM emission standard.

iii. See the Plant wide emission unit for additional PM₁₀ requirements.

c. **Opacity**

- i. For emission point E1 (Venus HIS fiberglass chop spray system): The owner or operator shall report any deviations from the requirements to inspect the filters and replace the filters as needed. If no deviations occur during the reporting period, the report shall contain a negative declaration.
- ii. For emission point E2 (ALC Sandy Jet sandblaster): See Specific Condition S3.d.i.

d. **HAP**

- i. For emission point E2 (ALC Sandy Jet sandblaster):
- 1) The owner or operator shall prepare and submit annual certification and compliance reports for each affected source according to the requirements of paragraphs (b)(2) through (7) of 40 CFR 63.11519. (40 CFR 63.11519(b)(1))
 - 2) 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. (40 CFR 63-11519(b)(2))
 - 3) 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. (40 CFR 63.11519(b)(2)(i))
 - 4) Each subsequent annual certification and compliance report must cover the subsequent annual reporting period from January 1 through December 31. (40 CFR 63.11519(b)(2)(ii))
 - 5) Each annual certification and compliance report must be prepared and submitted no later than January 31 and kept in a readily-accessible location for inspector review. If an exceedance has occurred during the year, each annual certification and compliance report must be submitted along with the exceedance reports, and postmarked or delivered no later than January 31. (40 CFR 63.11519(b)(2)(iii))
 - 6) The owner or operator shall submit the annual certification and compliance report containing the following information specified in paragraphs (b)(4)(i) through (b)(4)(iii) of 40 CFR 63.11519 and the information specified in paragraphs (b)(5) through (b)(7) of 40

CFR 63.11519, that is applicable to each affected source. (40 CFR 63.11519(b)(4))

- (a) The company name and address; (40 CFR 63.11519(b)(4)(i))
 - (b) A 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 (40 CFR 63.11519(b)(4)(ii))
 - (c) The 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. (40 CFR 63.11519(b)(4)(iii))
- 7) The owner or operator shall report all instances where visible emissions are detected, along with any corrective action taken and the results of subsequent follow-up inspections for visible emissions, with your annual certification and compliance report as required by 40 CFR 63.11519(b)(5), "Notification, recordkeeping, and reporting requirements." (40 CFR 63.11516(a)(3)(iv)(B))
- (a) The annual certification and compliance report must contain the information specified in paragraphs (b)(5)(i) through (iii) of 40 CFR 63.11519 for each affected source which performs visual determination of fugitive emissions in accordance with 40 CFR 63.11517(a), "Monitoring requirements." (40 CFR 63.11519(b)(5))
 - (i) The date of every visual determination of fugitive emissions which resulted in detection of visible emissions; (40 CFR 63.11519(b)(5)(i))
 - (ii) A description of the corrective actions taken subsequent to the test; and (40 CFR 63.11519(b)(5)(ii))
 - (iii) The date and results of the follow-up visual determination of fugitive emissions performed after the corrective actions. (40 CFR 63.11519(b)(5)(iii))

ii. See the Plant wide emission unit.

U1 Comment

1. The District has determined that the dry abrasive blasting, machining operation, and welding operation at this facility are subject to Federal Regulation 40 CFR 63, Subpart

XXXXXX, as per sections 63.11514(a) and 63.11514(b). These sections state that an area source primarily engaged in “Primary Metal Products Manufacturing” which uses materials containing either 0.1% cadmium, chromium, lead, or nickel, or 1.0% manganese, is subject to 40 CFR 63, Subpart XXXXXX. This operation uses welding wire containing 5.0% manganese to perform a metal fabrication process.

2. As per Federal Regulation 40 CFR 63, Subpart XXXXXX, the Initial Notification and Notification of Compliance Status were submitted to the District on July 26, 2011.

Emission Unit U2: Equipment Located at 700 E. Main St.**U2 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.17	Federally Enforceable District Origin Operating Permits	All
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants	1 - 4
6.09	Standards of Performance for Existing Process Operations	All
6.31	Standards of Performance for Existing Miscellaneous Metal Parts and Products Surface Coating Operations	All
7.08	Standards of Performance for New Process Operations	All
40 CFR 63 Subpart XXXXXX	National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories	63.11514, 63.11515, 63.11516, 63.11519

U2 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
E3	One (1) Paint Room with five (5) spray gun, Graco, for applying paint and epoxy to steel tanks	6.09; 6.31	C3	S3	1980
E4	One (1) Abrasive Blast Room, Hoffman/Schmidt, model # 0411-127-10, 6.5 cubic ft, two (2) nozzles using steel grit abrasive, for removing welding slag and surface rust from new steel.	7.08; 40CFR63 Subpart XXXXXX	C4	S4	1996

U2 Control Devices:

Control ID	Description	Control Efficiency	Performance Indicator	Stack ID
C3	Filters	90%	Monthly Filter Inspections	S3
C4	One (1) Baghouse; Hoffman/Torit, model # HDFT 4-32 pulse jet, with 32 cartridge filters. Filter Area: 254 square feet per filter	95%	Monthly VEs	S4

U2 Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. VOC

i. For emission point E3 (paint booth):

- 1) The owner or operator shall not cause or allow the emission of VOC from emission point E3 (paint booth) resulting from the coating of metallic surfaces in excess of the applicable emission rate as follows: (Regulation 6.31, section 3.1)⁹
 - (a) 4.3 lb/gal of coating, excluding water and exempt solvents, as applied for clear coatings,
 - (b) 3.5 lb/gal of coating, excluding water and exempt solvents, as applied for air-dried coatings,
 - (c) 3.5 lb/gal of coating, excluding water and exempt solvents, as applied for extreme performance coatings, or
 - (d) 3.0 lb/gal of coating, excluding water and exempt solvents, as applied for all other coatings.
- 2) Compliance with the emission limits specified in Specific Condition S1.a.i shall be based upon the coatings used for the affected facility during a month averaging period. (Regulation 6.31, section 3.2)
- 3) If more than one limit of Specific Condition S1.a.i would be applicable for a specific coating, the least stringent limit shall apply. (Regulation 6.31, section 3.3)

b. PM/PM₁₀

- i. The owner or operator shall not allow PM emissions from emission point E3 (paint booth) to exceed 2.58 lb/hr, based on actual operating hours in a calendar day. (Regulation 6.09, section 3.2)¹⁰
- ii. The owner or operator shall not allow PM emissions from emission point E4 (abrasive blast room) to exceed 8.48 lb/hr, based on actual operating hours in a calendar day. (Regulation 7.08, section 3.1.2)¹¹

⁹ Service Welding's request dated 2/26/2010, was to utilize compliant coatings as specified in Regulation 6.31, section 3.1, in order to avoid the 5 tons per year VOC emission limit for the paint booth.

¹⁰ Using the minimum spray gun transfer efficiency of 65%, the percent solids of the material (40%), and the maximum amount of coatings that can be applied each year of 8,192 gallons (based on the time needed to construct the tanks at 300 sq ft/hr), the 2.58 lb/hr PM emission limits of the spray booth cannot be exceeded uncontrolled.

- iii. For emission point E4 (abrasive blast room): The owner or operator shall operate and maintain the control device at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice to meet the standards. (Regulation 2.03, section 6.1)
- iv. See the Plant wide emission unit for additional PM₁₀ requirements.

c. **Opacity**

For both emission point E3 (paint booth) and emission point E4 (abrasive blast room): The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 6.09, section 3.1 and Regulation 7.08, section 3.1.1)

d. **HAP**

- i. For emission point E3 (paint booth):
 - 1) The owner or operator shall not use any spray application coatings, additives, catalyst, solvents, or thinners containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), or perform any paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl), in the paint removal process.¹²
 - 2) The owner or operator shall submit notification for approval, to the District, prior to any change in raw materials used for the purposes of stripping and surface coating operations. Only raw materials compliant with the current permitted standards will be approved by the District without revision to the permit.
- ii. For emission point E4 (abrasive blast room):
 - 1) The owner or operator shall capture emissions and vent them to a filtration control device. The owner or operator shall operate the filtration control device according to manufacturer's instructions, and demonstrate compliance with this requirement by maintaining a record of the manufacturer's specifications for the filtration control devices, as specified by the requirements in paragraph 63.11519(c)(4) of 40 CFR 63.11519. (40 CFR 63.11516(a)(2)(i))

¹¹ Utilizing AP-42 emission factors for abrasive blasting the lb/hr PM emission standard can be exceeded.

¹² The equipment or processes covered by this permit are not currently subject to the standards of the NESHAP, 40 CFR 63 subpart XXXXXX, due to the absence of the afore mentioned chemicals in the spray coatings and paint stripping compounds.

- 2) The owner or operator shall implement the management practices to minimize emissions of MFHAP as specified in paragraphs 63.11516(a)(2)(ii)(A) through (C) of 40 CFR 63.11516. (40 CFR 63.11516(a)(ii))
 - (a) The owner or operator shall take measures necessary to minimize excess dust in the surrounding area to reduce MFHAP emissions, as practicable; and. (40 CFR 63.11516(a)(ii)(A))
 - (b) The owner or operator shall enclose dusty abrasive material storage areas and holding bins, seal chutes and conveyors that transport abrasive materials; and. (40 CFR 63.11516(a)(ii)(B))
 - (c) The owner or operator shall operate all equipment associated with dry abrasive blasting operations according to manufacturer's instructions. (40 CFR 63.11516(a)(ii)(C))

iii. See the Plant wide emission unit.

S2. **Monitoring and Record Keeping** (Regulation 2.17, section 5.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

i. For emission point E3 (paint booth):

- 1) An owner or operator of an affected facility subject to this regulation shall maintain records that include, but not be limited to, the following: (Regulation 6.31, section 6.1)
 - (a) The regulation and section number applicable to the affected facility for which the records are being maintained,
 - (b) The application method and substrate type,¹³
 - (c) The amount and type of coatings (including catalyst and reducer for multi-component coatings) and solvent (including exempt compounds) used at each point of application during the averaging period. The District may specifically authorize the usage record to reflect a period

¹³ The application method will be air assisted airless paint spray gun application of solvent-based paint, and the substrate type will be metal. The owner or operator shall be allowed to maintain a one time record of the information and to notify the District if the company decides to make any changes to this information in order to demonstrate compliance with the daily record keeping requirements.

longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month,

- (d) The VOC content as applied in each coating and solvent,
 - (e) The date, or usage record period, for each application of coating and solvent,
 - (f) The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month.
- 2) The VOC content shall be calculated using a percent solids basis (excluding water and exempt solvents) for coatings using EPA Method 24. (Regulation 6.31, section 6.2)

b. PM/PM₁₀

- i. For emission point E4 (abrasive blast room): The owner or operator shall maintain daily records of any periods of time where the process was operating and the control device was not operating or a declaration that the control device operated at all times that day when the process was operating. The record for each bypass event shall include the following:
 - 1) Date;
 - 2) Start time and stop time;
 - 3) Identification of the control device and process equipment;
 - 4) PM emissions for each hour during the bypass in lb/hr during bypass period, utilizing the calculation methodology in the plant wide emission unit;
 - 5) Summary of the cause or reason for each bypass event;
 - 6) Corrective action taken to minimize the extent or duration of the bypass event; and
 - 7) Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event.
- ii. See the Plant wide emission unit for additional PM₁₀ requirements.

c. Opacity

- i. For emission point E3 (paint booth):
 - 1) The owner or operator shall inspect the filter system at least monthly to ensure proper installment (i.e. proper alignment/placement, gaps, etc.) and replace as needed.
 - 2) The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters and if filters were replaced.
- ii. For emission point E4 (abrasive blast room):
 - 1) The owner or operator shall conduct a monthly one-minute visible emissions survey, during normal operation, of the emission points. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.
 - 2) At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.
 - 3) The owner or operator shall maintain records, monthly, of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

d. HAP

- i. For emission point E3 (paint booth): The owner or operator shall keep a record of the MSDS for each raw material.
- ii. For emission point E4 (abrasive blast room):
 - 1) Maintain a record of the manufacturer's specifications for the control devices used to comply with 40 CFR 63.11516, "What are my standards and management practices?" (40 CFR 63.11519(c)(4))
 - 2) If you comply with this subpart by operating any equipment according to manufacturer's instruction, you must keep these

instructions readily available for inspector review. (40 CFR 63.11519(c)(13))

iii. See the Plant wide emission unit.

S3. Reporting (Regulation 2.17, section 5.2)

a. VOC

i. For emission point E3 (paint booth): The owner or operator shall identify any exceedance of the coating VOC content limits. If no deviations occur during the reporting period, the report shall contain a negative declaration.

b. PM/PM₁₀

i. For emission point E4 (abrasive blast room): The owner or operator shall identify all periods of exceeding PM lb/hr emission standards during a reporting period. The report shall include the following:

- 1) Emission point ID number;
- 2) The date and duration (including the start and stop time) during which a deviation occurred;
- 3) The quantity of excess emissions;
- 4) Summary information on the cause or reason for excess emissions;
- 5) Corrective action taken to minimize the extent and duration of each excess emissions event;
- 6) Measures implemented to prevent reoccurrence of the situation that resulted in excess PM emissions;
- 7) If no deviations occur during a semi-annual reporting period, the report shall contain a negative declaration

ii. See the Plant wide emission unit for additional PM₁₀ requirements.

c. Opacity

i. For emission point E3 (paint booth): The owner or operator shall report any deviations from the requirements to inspect the filters and replace the filters as needed. If no deviations occur during the reporting period, the report shall contain a negative declaration.

ii. For emission point E4 (abrasive blast room):

- 1) Any deviation from the requirement to perform monthly visible emission surveys or Method 9 tests;
- 2) Any deviation from the requirement to record the results of each VE survey and Method 9 test performed;

- 3) The number, date, and time of each VE Survey where visible emissions were observed and the results of the Method 9 test performed;
- 4) Identification of all periods of exceeding an opacity standard; and
- 5) Description of any corrective action taken for each exceedance of the opacity standard.
- 6) If no deviations occur during a semi-annual reporting period, the report shall contain a negative declaration.

d. **HAP**

- i. For emission point E3 (paint booth): The owner or operator shall submit notification to the District for approval of any raw material change.
- ii. For emission point E4 (abrasive blast room): There are no equipment specific reporting requirements for 40 CFR 63 Subpart XXXXXX.
- iii. See the Plant wide emission unit.

U2 Comment

1. The District has determined that the dry abrasive blasting, machining operation, and welding operation at this facility are subject to Federal Regulation 40 CFR 63, Subpart XXXXXX, as per sections 63.11514(a) and 63.11514(b). These sections state that an area source primarily engaged in "Primary Metal Products Manufacturing" which uses materials containing either 0.1% cadmium, chromium, lead, or nickel, or 1.0% manganese, is subject to 40 CFR 63, Subpart XXXXXX. This operation uses welding wire containing 5.0% manganese to perform a metal fabrication process.
2. As per Federal Regulation 40 CFR 63, Subpart XXXXXX, the Initial Notification and Notification of Compliance Status were submitted to the District on July 26, 2011

Emission Unit 3: Welding and Machining Equipment Located at 700 E. Main St.

U3 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.17	Federally Enforceable District Origin Operating Permits	All
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants	1 - 4
7.08	Standards of Performance for New Process Operations	All
40 CFR 63 Subpart XXXXXX	National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories	63.11514, 63.11515, 63.11516, 63.11519

U3 Equipment subject to the area source MACT:

Emission Point (IA)	Description	Applicable Regulation	Control ID	Stack ID
E6 ¹⁴	Twenty-three (23) Welding equipment consisting of: Lincoln Idealarc TM-300/300, AC/DC, s/n AC-642234 L-Tec 450 Pulse, s/n D88J-81051 Lincoln Idealarc TM-300/300, s/n AC-207669 Lincoln Invertec V200-T, s/n 12980500687 Lincoln Invertec V350-T, s/n 12980100026 Lincoln SAE400, s/n 74959 Lincoln SAE300, s/n A152171 (5) Lincoln Idealarc TM-300/300 Lincoln SA-200-F163, s/n 142191 Lincoln SAE300, s/n A133288 Lincoln Idealarc DC600, s/n AC455566 Lincoln Idealarc DC600, s/n AC573246 Lincoln R35-600, s/n AC360100 Lincoln Invertec V350-Pro, s/n U1020226999 (2) Lincoln Power Wave 455 (1 is SST) Lincoln Idealarc TM-500/500, AC/DC, s/n AC775409 Lincoln Idealarc TM-300/300, A/C, s/n AC-265465	7.08; 40CFR63 Subpart XXXXXX	N/A	N/A

¹⁴ This equipment may be utilized at either location (175 N Wenzel or 700 E Main).

Emission Point (IA)	Description	Applicable Regulation	Control ID	Stack ID
	Lincoln Flextec 500P			
E7	Ten (10) Machining equipment consisting of: Blue Valley Machine & Manufacturing, Circle Shear 45B-187 Landis triple head threading machine Ridgid 535, threading machine, s/n 386668 Thomas Machine & Manufacturing, Angle Roll, s/n 8191 Walker Turner, Drill Press Wilton 5816 drill press, s/n 29086 Wissota E-6W, bench grinder, double end, s/n W3-87 Bertsch, power plate roller, s/n M-9985 Webb, triple roll, plate roll (1940s) Wysong 1238, Shear, s/n P35-173	7.08; 40CFR63 Subpart XXXXXX	N/A	N/A

U3 Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. **PM₁₀**

- i. For emission points E6 (welding equipment) and E7 (machining equipment): The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr for each piece of welding equipment and machining equipment, based on actual operating hours in a calendar day. (Regulation 7.08, section 3.1.2)
- ii. See the Plant wide emission unit for additional PM₁₀ requirements.

b. **Opacity**

For emission points E6 (welding equipment) and E7 (machining equipment): The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

c. **HAP**

- i. For emission point E6 (welding equipment):
 - 1) The owner or operator shall comply with the requirements in paragraphs (f)(1) and (2) of 40 CFR 63.11516 for each welding operation that uses materials containing Metal Fabrication and Finishing HAPs (MFHAP), as defined in 40 CFR 63.11522, 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 owner or operator shall demonstrate that management practices or fume control measures are being implemented by complying with the requirements in paragraphs (f)(3) through (f)(8) of 40 CFR 63.11516. The requirements in paragraphs (f)(1) through (f)(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. (40 CFR 63.11516(f))
 - (a) The owner or operator shall operate all equipment, capture, and control devices associated with welding operations according to manufacturer's instructions. The owner or operator shall demonstrate compliance with this requirement by maintaining a record of the manufacturer's specifications for the capture and control devices, as

- specified by the requirements in 40 CFR 63.11519(c)(4). (40 CFR 63.11516(f)(1))
- (b) The owner or operator shall 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. (40 CFR 63.11516(f)(2))
- (i) Use welding processes with reduced fume generation capabilities (e.g., gas metal arc welding (GMAW) – also called metal inert gas welding (MIG)); (40 CFR 63.11516(f)(2)(i))
 - (ii) Use welding process variations (e.g., pulsed current GMAW), which can reduce fume generation rates; (40 CFR 63.11516(f)(2)(ii))
 - (iii) Use welding filler metals, shielding gases, carrier gases, or other process materials which are capable of reduced welding fume generation; (40 CFR 63.11516(f)(2)(iii))
 - (iv) Optimize welding process variables (e.g., electrode diameter, voltage, amperage, welding angle, shield gas flow rate, travel speed) to reduce the amount of welding fume generated; and (40 CFR 63.11516(f)(4)(iv))
 - (v) Use a welding fume capture and control system, operated according to the manufacturer's specifications. (40 CFR 63.11516(f)(2)(v))
- (c) *Tier 1 compliance requirements.* The owner or operator shall perform visual determinations of welding fugitive emissions at the primary vent, stack, exit, or opening from the building containing the welding operations. The owner or operator shall keep a record of all visual determinations of fugitive emissions along with any corrective action taken. (40 CFR 63.11516(f)(3))
- (d) *Requirements upon initial detection of visible emissions from welding.* If visible fugitive emissions are detected during any visual determination, the owner or operator shall comply with the requirements in paragraphs (f)(4)(i) and (ii) of 40 CFR 63.11516. (40 CFR 63.11516(f)(4))
- (i) The owner or operator shall 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. After completing such corrective action, the owner or operator shall perform a follow-up inspection for visible fugitive emissions at the primary vent, stack, exit, or opening from the building containing the welding operations. (40 CFR 63.11516(f)(4)(i))

- (e) *Tier 2 requirements upon subsequent upon 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 owner or operator shall comply with paragraphs (f)(5)(i) through (iv) of 40 CFR 63.11516. (40 CFR 63.11516(f)(5))
- (i) Within 24 hours of the end of the visual determination of fugitive emissions in which visible fugitive emissions were detected, the owner or operator shall conduct a visual determination of emissions opacity at the primary vent, stack, exit, or opening from the building containing the welding operations. (40 CFR 63.11516(f)(5)(i))
- (ii) In lieu of the requirement to perform visual determinations of fugitive emissions with EPA Method 22, the owner or operator shall 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. (40 CFR 63.11516(f)(5)(ii))
- (iii) The owner or operator shall keep a record of each visual determination of emissions opacity performed along with any subsequent corrective action taken. (40 CFR 63.11516(f)(5)(iii))
- (f) *Requirements for opacities less than or equal to 20 percent but greater than zero.* For each visual determination of emissions opacity performed for which the average of the six-minute average opacities recorded is 20 percent or less but greater than zero, the owner or operator shall 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. (40 CFR 63.11516(f)(6))
- (g) *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 owner or operator shall comply with the requirements in paragraphs (f)(7)(i) through (v) of 40 CFR 63.11516. (40 CFR 63.11516(f)(7))

- (i) Within 30 days of the opacity exceedence, the owner or operator shall prepare and implement a Site-Specific Welding Emissions Management Plan. If a Site-Specific Welding Emissions Management Plan already exists at the facility, the owner or operator shall prepare and implement a revised Site-Specific Welding Emissions Management Plan within 30 days. (40 CFR 63.11516(f)(7)(ii))
 - (ii) During the preparation (or revision) of the Site-Specific Welding Emissions Management Plan, the owner or operator shall 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. (40 CFR 63.11516(f)(7)(iii))
- (h) *Site-Specific Welding Emissions Management Plan.* The Site-Specific Welding Emissions Management Plan shall comply with the following requirements. (40 CFR 63.11516(f)(8))
- (i) The Site-Specific Welding Emissions Management Plan shall contain the following information. (40 CFR 63.11516(f)(8)(i))
 - (A) Company name and address; (40 CFR 63.11516(f)(8)(i)(A))
 - (B) A list and description of all welding operations which currently comprise the welding affected source; (40 CFR 63.11516(f)(8)(i)(B))
 - (C) A description of all management practices and/or fume control methods in place at the time of the opacity exceedence; (40 CFR 63.11516(f)(8)(i)(C))
 - (D) A list and description of all management practices and/or fume control methods currently employed for the welding affected source; (40 CFR 63.11516(f)(8)(i)(D))

- (E) A description of additional management practices and/or fume control method to be implemented pursuant to paragraph (f)(7)(ii), and the projected date of implementation; and (40 CFR 63.11516(f)(8)(i)(E))
 - (F) Any revisions to a Site-Specific Welding Emissions Management Plan shall contain copies of all previous plan entries. (40 CFR 63.11516(f)(8)(i)(F))
 - (ii) The owner or operator shall update the Site-Specific Welding Emissions Management Plan annually and submit with the annual certification and compliance report. (40 CFR 63.11516(f)(8)(ii))
 - (iii) The owner or operator shall maintain a copy of the current Site-Specific Welding Emissions Management Plan in the company records in a readily-accessible location for inspector review. (40 CFR 63.11516(f)(8)(iii))
- ii. For emission point E7 (machining equipment):
- 1) The owner or operator shall implement management practices to minimize emissions of MFHAP as specified in paragraph (b)(1) and (2) of 40 CFR 63.11516(b) for each machining operation that uses materials that contain MFHAP, as defined in paragraph 63.11522, "What definitions apply to this subpart?". (40 CFR 63.11516(b))
 - (a) The owner or operator shall take measures necessary to minimize excess dust in the surrounding area to reduce MFHAP emissions, as practicable; and (40 CFR 63.11516(b)(1))
 - (b) The owner or operator shall operate all equipment associated with machining according to manufacturer's instructions. (40 CFR 63.11516(b)(2))
- iii. See the Plant wide emission unit.

S2. Monitoring and Record Keeping (Regulation 2.17, section 5.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **PM/PM₁₀**

- i. There are no monitoring or record keeping requirements for emission points E6 (welding equipment) and E7 (machining equipment) related to the lb/hr PM emission standard.
- ii. See the Plant wide emission unit for additional PM₁₀ requirements.

b. **Opacity**

See specific condition S2.c.¹⁵

c. **HAP**

- i. For emission point E6 (welding equipment):
 - 1) *Visual determination of fugitive emissions, general.* Visual determinations of fugitive emissions shall be performed according to the procedures of EPA Method 22, of 40 CFR part 60, Appendix A-7. The owner or operator shall conduct the EPA Method 22 test while the affected source is operating under normal conditions. The duration of each EPA Method 22 test shall be at least fifteen (15) minutes, and visible emissions will be considered to be present if they are detected for more than six (6) minutes of the fifteen (15) minute period. (40 CFR 63.11517(a))
 - 2) *Visual determination of fugitive emissions, graduated schedule.* Visual determinations of fugitive emissions shall be performed in accordance with the paragraph above according to the following schedule. (40 CFR 63.11517(b))
 - (a) *Daily Method 22 Testing.* The owner or operator shall perform visual determinations of fugitive emissions once per day, on each day the process is in operation, during operation of the process. (40 CFR 63.11517(b)(1))
 - (b) *Weekly Method 22 Testing.* If there are no visible fugitive emissions detected in ten (10) consecutive daily tests, the frequency may be reduced to testing once every calendar week (five (5) work days of operation). If visible fugitive emissions are detected during these tests, the owner or operator shall resume testing of that operation once per day during each day that the process is in operation. (40 CFR 63.11517(b)(2))

¹⁵ The District has determined that compliance with the area source MACT (40 CFR 63 Subpart XXXXXX) is sufficient for demonstrating compliance for the opacity standard in Regulation 7.08

- (c) *Monthly Method 22 Testing.* If there are no visible fugitive emissions detected in four (4) consecutive weekly tests, the frequency may be reduced to testing once every calendar month (twenty-one (21) work days of operation). If visible fugitive emissions are detected during these tests, the owner or operator shall resume weekly testing. (40 CFR 63.11517(b)(3))
 - (d) *Quarterly Method 22 Testing.* If there are no visible fugitive emissions detected in three (3) consecutive monthly tests, the frequency may be reduced to testing once every three (3) calendar months (sixty (60) work days of operation). If visible fugitive emissions are detected during these tests, the owner or operator shall resume monthly testing. (40 CFR 63.11517(b)(4))
- 3) *Visual determination of emissions opacity for welding Tier 2 or 3, general.* Visual determination of emissions opacity shall be performed in accordance with the procedures of EPA Method 9, of 40 CFR part 60, Appendix A-4, and while the affected source is operating under normal conditions. The duration of the EPA Method 9 test shall be thirty (30) minutes. (40 CFR 63.11517(c))
 - 4) *Visual determination of emissions opacity for welding Tier 2 or 3, graduated schedule.* The owner or operator shall perform visual determinations of emissions opacity in accordance with the paragraph above and according to the following schedule. (40 CFR 63.11517(d))
 - (a) *Daily Method 9 testing for welding, Tier 2 and 3.* The owner or operator shall perform visual determinations of emissions opacity once per day during each day that the process is in operation. (40 CFR 63.11517(d)(1))
 - (b) *Weekly Method 9 testing for welding Tier 2 and 3.* If the average of the six (6) minute opacities recorded during any of the daily consecutive EPA Method 9 tests does not exceed twenty (20%) percent for ten (10) days of operation of the process, the owner or operator may decrease the frequency of the EPA Method 9 testing to once per five (5) days of consecutive work day operation. If opacity greater than twenty (20%) percent is detected during any of these tests, the owner or operator shall resume testing every day of operation of the process. (40 CFR 63.11517(d)(2))
 - (c) *Monthly Method 9 testing for welding Tier 2 and 3.* If the average of the six (6) minute opacities recorded during any of the consecutive weekly EPA Method 9 test does not exceed twenty (20%) percent for four (4) consecutive

- weekly tests, the owner or operator may decrease the frequency of the EPA Method 9 testing to once per twenty-one (21) days of operation of the process. If visible emissions opacity greater than twenty (20%) percent is detected during any quarterly test, the owner or operator shall resume testing every twenty-one (21) days (month) of operation of the process. (40 CFR 63.11517(d)(3))
- (d) *Quarterly Method 9 testing for welding Tier 2 or 3.* If the average of the six (6) minute opacities recorded during any of the consecutive weekly EPA Method 9 tests does not exceed twenty (20%) percent for three (3) consecutive monthly tests, the owner or operator may decrease the frequency of the EPA Method 9 testing to once every one hundred twenty (120) days of operation of the process. If visible opacity emissions greater than twenty (20%) percent is detected during any quarterly test, the owner or operator shall resume testing every twenty-one (21) days (month) of operation of the process. (40 CFR 63.11517(d)(4))
- (e) *Return to Method 22 testing for welding, Tier 2 or 3.* If, after two (2) consecutive months of testing, the average six (6) minute opacities recorded during any of the monthly EPA Method 9 tests does not exceed twenty (20%) percent, the owner or operator may resume EPA Method 22 testing. In lieu of this, the owner or operator may elect to continue performing EPA Method 9 testing. (40 CFR 63.1117(d)(5))
- 5) The owner or operator shall collect and maintain records of the data and information specified in paragraphs (c)(1) through (c)(13) of 40 CFR 63.11519, according to the requirements in paragraph (c)(14) of 40 CFR 63.11519. (40 CFR 63.11519(c))
- (a) The owner or operator shall maintain information specified in the following paragraphs. (40 CFR 63.11519(c)(1))
- (i) A copy of each notification and report that is submitted to comply with this subpart, and the documentation supporting each notification and report. (40 CFR 63.11519(c)(1)(i))
- (ii) Records of the applicability determinations listing equipment included in its affected source, as well as any changes and on what date they occurred. (40 CFR 63.11519(c)(1)(ii))
- (b) The owner or operator shall maintain a record of the following information for each affected source which performs visual determinations of fugitive emissions. (40 CFR 63.11519(c)(2))

- (i) The date of every visual determination of fugitive emissions; (40 CFR 63.11519(c)(2)(i))
 - (ii) A description of any corrective action taken subsequent to the test; and (40 CFR 63.11519(c)(2)(ii))
 - (iii) The date and results of any follow-up visual determination of fugitive emissions performed after the corrective actions. (40 CFR 63.11519(c)(2)(iii))
- (c) The owner or operator shall maintain a record of the following information for each affected source which performs visual determinations of emissions opacity. (40 CFR 63.11519(c)(3))
- (i) The date of every visual determination of emissions opacity; (40 CFR 63.11519(c)(3)(i))
 - (ii) The average of the six (6) minute opacities measured by the test; and (40 CFR 63.11519(c)(3)(ii))
 - (iii) A description of any corrective action taken subsequent to the test. (40 CFR 63.11519(c)(3)(iii))
- (d) The owner or operator shall maintain a record of each visual determination of emissions opacity performed during the preparation (or revision) of a Site-Specific Welding Emissions Management Plan. (40 CFR 63.11519(c)(11))
- (e) If the owner or operator has been required to prepare a Site-Specific Welding Emissions Management Plan, a copy of the plan shall be maintained in the company's records. (40 CFR 63.11519(c)(12))
- (f) The owner or operator shall maintain records of the daily visual determinations of emissions opacity performed in accordance with paragraph (f)(7)(iii) of 40 CR 63.11516, during preparation of the Site-Specific Welding Emissions Management Plan, in accordance with the requirements in 40 CFR 63.11519(b)(9), "Notificaiton, recordkeeping, and reporting requirements." (40 CFR 63.11516(f)(7)(iv))
- (g) The owner or operator shall include these records in the annual certification and compliance report. (40 CFR 63.11516(f)(7)(v))
- (h) If the owner or operator complies with this subpart by operating any equipment according to manufacturer's instructions, the owner or operator shall maintain a copy of these instructions. (40 CFR 63.11519(c)(13))
- (i) The owner or operator shall maintain records according to the following requirements. (40 CFR 63.11519(c)(15))
- (i) Records shall be in a form suitable and readily available for expeditious review. Where appropriate, the records shall be maintained as

electronic spreadsheets or in a database. (40 CFR 63.11519(c)(15)(i))

- (ii) Records shall be retained for five (5) years following the date of each occurrence, measurement, corrective action, report, or record. (40 CFR 63.11519(c)(15)(ii))
- (iii) Records shall be retained on-site for at least two (2) years after the date of each occurrence, measurement, corrective action, report, or record. The owner or operator may choose to keep the records off-site for the remaining three (3) years. (40 CFR 63.11519(c)(15)(iii))

ii. For emission point E7 (machining equipment):

- 1) If you comply with this subpart by operating any equipment according to manufacturer's instruction, you must keep these instructions readily available for inspector review. (40 CFR 63.11519(c)(13))

iii. See the Plant wide emission unit.

S3. Reporting (Regulation 2.17, section 5.2)

a. **PM/PM₁₀**

- i. There are no reporting requirements for emission points E6 (welding equipment) and E7 (machining equipment) related to the lb/hr PM emission standard.
- ii. See the Plant wide emission unit for additional PM₁₀ requirements.

b. **Opacity**

See specific condition S3.c.

c. **HAP**

i. For emission point E6 (welding equipment):

- 1) The owner or operator shall prepare and submit annual certification and compliance reports for each affected source according to the requirements of paragraphs (b)(2) through (7) of 40 CFR 63.11519. (40 CFR 63.11519(b)(1))

- 2) 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. (40 CFR 63-11519(b)(2))
- 3) 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. (40 CFR 63.11519(b)(2)(i))
- 4) Each subsequent annual certification and compliance report must cover the subsequent annual reporting period from January 1 through December 31. (40 CFR 63.11519(b)(2)(ii))
- 5) Each annual certification and compliance report must be prepared and submitted no later than January 31 and kept in a readily-accessible location for inspector review. If an exceedance has occurred during the year, each annual certification and compliance report must be submitted along with the exceedance reports, and postmarked or delivered no later than January 31. (40 CFR 63.11519(b)(2)(iii))
- 6) The owner or operator shall submit the annual certification and compliance report containing the following information specified in paragraphs (b)(4)(i) through (b)(4)(iii) of 40 CFR 63.11519 and the information specified in paragraphs (b)(5) through (b)(7) of 40 CFR 63.11519, that is applicable to each affected source. (40 CFR 63.11519(b)(4))
 - (a) The company name and address; (40 CFR 63.11519(b)(4)(i))
 - (b) A 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 (40 CFR 63.11519(b)(4)(ii))
 - (c) The 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. (40 CFR 63.11519(b)(4)(iii))
- 7) The annual certification and compliance report shall contain the following information for each affected source which performs visual determinations of fugitive emissions. (40 CFR 63.11519(b)(5))

- (a) The date of every visual determination of fugitive emissions which resulted in detection of visible emissions; (40 CFR 63.11519(b)(5)(i))
 - (b) A description of the corrective actions taken subsequent to the test; and (40 CFR 63.11519(b)(4)(ii))
 - (c) The date and results of the follow-up visual determination of fugitive emissions performed after the corrective actions. (40 CFR 63.11519(b)(4)(iii))
- 8) The annual certification and compliance report shall contain the following information for each affected source which performs visual determinations of emissions opacity. (40 CFR 63.11519(b)(6))
- (a) The date of every visual determination of emissions opacity; (40 CFR 63.11519(b)(6)(i))
 - (b) The average of the six (6) minute opacities measured by the test; and (40 CFR 63.11519(b)(6)(ii))
 - (c) A description of any corrective action taken subsequent to the test. (40 CFR 63.11519(b)(6)(iii))
- 9) The owner or operator shall prepare an exceedance report containing the following information whenever the average of the six (6) minute average opacities recorded during a visual determination of emissions opacity exceeds twenty (20%) percent. This report shall be submitted along with the annual certification and compliance report. (40 CFR 63.11519(b)(8))
- (a) The date on which the exceedance occurred; and (40 CFR 63.11519(b)(8)(A))
 - (b) The average of the six (6) minute average opacities recorded during the visual determination of emissions opacity. (40 CFR 63.11519(b)(8)(B))
- 10) The owner or operator shall submit a copy of the records of daily visual determinations of emissions recorded and a copy of the Site-Specific Welding Emissions Management Plan and any subsequent revisions to the plan, along with the annual certification and compliance report. (40 CFR 63.11519(b)(9))
- ii. For emission point E7 (machining equipment): There are no equipment specific reporting requirements for 40 CFR 63 Subpart XXXXXX.
 - iii. See the Plant wide emission unit.

U3 Comment

1. The District has determined that the dry abrasive blasting, machining operation, and welding operation at this facility are subject to Federal Regulation 40 CFR 63, Subpart XXXXXX, as per sections 63.11514(a) and 63.11514(b). These sections state that an area source primarily engaged in “Primary Metal Products Manufacturing” which uses materials containing either 0.1% cadmium, chromium, lead, or nickel, or 1.0% manganese, is subject to 40 CFR 63, Subpart XXXXXX. This operation uses welding wire containing 5.0% manganese to perform a metal fabrication process.
2. As per Federal Regulation 40 CFR 63, Subpart XXXXXX, the Initial Notification and Notification of Compliance Status were submitted to the District on July 26, 2011

Emission Unit 4: Diesel Storage Tank Located at 700 E. Main St.

U4 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.17	Federally Enforceable District Origin Operating Permits	All
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	All

U4 Equipment:

Emission Point (IA)	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
E8	One (1) 500 gallon aboveground Diesel storage tank	7.12	N/A	N/A	After 1972

U4 Specific Conditions

S1. **Standards** (Regulation 2.17, section 5.1)

a. **VOC**

For emission point E8 (diesel storage tank): The owner or operator shall not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia in the storage vessel(s), unless the storage tank is equipped with a permanent submerged fill pipe. (Regulation 7.12, section 3.3)

S2. **Monitoring and Record Keeping** (Regulation 2.17, section 5.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

For emission point E8 (diesel storage tank):

- i. The owner or operator of the storage vessel(s) shall maintain records of the material stored and the vapor pressure in each storage vessel and if the contents of the storage vessel(s) are changed a record shall be made of the new contents, the date of the change, and the new vapor pressure in order to demonstrate compliance with Specific Condition **Error! Reference source not found.**
- ii. The owner or operator shall keep a record that shows if the storage vessel is equipped with a submerged fill pipe. Submerged fill pipe means any fill pipe the discharge of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean every fill pipe the discharge opening of which is entirely submerged when the liquid level is 2 times the fill pipe diameter above the bottom of the tank.

S3. **Reporting** (Regulation 2.17, section 5.2)

a. **VOC**

There are no reporting requirements for emission point E8 (diesel storage tank) related to the VOC emission standard.

Emission Unit 5: Gasoline Storage and Refueling Operation Located at 700 E. Main St.

U5 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.17	Federally Enforceable District Origin Operating Permits	All
7.15	Standards of Performance for Gasoline Transfer to New Service Station Storage Tanks (Stage I Vapor Recovery)	1 - 6

U5 Equipment:

Emission Point (IA)	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
E9	One (1) 550 gallon underground Gasoline storage tank with refueling pump	7.15	N/A	N/A	After 1979

U5 Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. VOC

- i. For emission point E9 (gasoline storage tank and refueling pump):
 - 1) The owner or operator shall maintain and operate the following devices on the storage tank: (Regulation 7.15, section 3.1)
 - (a) Submerged fill pipe; (Regulation 7.15, section 3.1.1)
 - (b) If the gasoline storage tank is equipped with a separate gauge well, a gauge well drop tube shall be installed which extends to within six inches of the bottom of the tank; (Regulation 7.15, section 3.1.2)
 - (c) Vent line restrictions on the affected facility; and (Regulation 7.15, section 3.1.3)
 - (d) Vapor balance system and vapor tight connections on the liquid fill and vapor return hoses. The cross-sectional area of the vapor return hose and any other vapor return passages in the circuit connecting the vapor space in the service station tank to that of the truck tank must be at least 50% of the liquid fill hose cross-sectional area for tank and free of flow restrictions to achieve acceptable recovery. The vapor balance equipment must be maintained according to the manufacturer's specifications. The type, size, and design of the vapor balance system are subject to the approval of the District. (Regulation 7.15, section 3.1.4)
 - 2) The owner or operator may elect to use an alternate control system provided it can be demonstrated to the District's satisfaction to achieve an equivalent control efficiency. (Regulation 7.15, section 3.2)
 - 3) The owner or operator shall not allow delivery of fuel to the storage tank until the vapor balance system is properly connected to the transport vehicle and the affected facility. (Regulation 7.15, section 3.3)
 - 4) No person shall deliver gasoline to a service station without connecting the vapor return hose between the tank of the delivery truck and the storage tank receiving the product. The vapor balance system must be operating in accordance with the manufacturer's specifications. (Regulation 7.15, section 3.4)

- 5) Opening of a truck tank hatch for the purpose of visual inspection is permitted for a period not to exceed one minute and only after pumping from that compartment has stopped for at least three minutes prior to the opening. All truck tank hatches must be closed during pumping. (Regulation 7.15, section 3.5)
- 6) All lines must be gravity drained in such a manner that upon disconnect no liquid spillage would be expected. (Regulation 7.15, section 3.6)
- 7) Equipment subject to this section shall be operated and maintained with no defects and: (Regulation 7.15, section 3.8)
 - (a) All fill tubes shall be equipped with vapor-tight covers including gaskets, (Regulation 7.15, section 3.8.1)
 - (b) All dry breaks shall have vapor-tight seals and shall be equipped with vapor-tight covers or dust covers, (Regulation 7.15, section 3.8.2)
 - (c) All vapor return passages shall be operated so there can be no obstruction of vapor passage from the storage tank back to the delivery vehicle, (Regulation 7.15, section 3.8.3)
 - (d) All storage tank vapor return pipes and fill pipes without dry breaks shall be equipped with vapor-tight covers including gaskets, and (Regulation 7.15, section 3.8.4)
 - (e) All hoses, fitting, and couplings shall be in a vapor-tight condition. (Regulation 7.15, section 3.8.5)
- 8) The owner or operator shall not allow a monthly throughput to exceed 10,000 gallons of gasoline. (Regulation 6.40, section 1.1)¹⁶

S2. Monitoring and Record Keeping (Regulation 2.17, section 5.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. VOC

- i. For emission point E9 (gasoline storage tank and refueling pump):
 - 1) Compliance with Regulation 7.15 will be verified by inspections performed by District Personnel. (Regulation 7.15, section 6)
 - 2) The owner or operator shall, monthly, record the gasoline throughput in gallons for that month.

¹⁶ The gasoline throughput limit is to avoid being subject to Regulation 6.40 and having to install Stage II Vapor Recovery and Control.

S3. **Reporting** (Regulation 2.17, section 5.2)

a. **VOC**

- i. For emission point E9 (gasoline storage tank and refueling pump): The owner or operator shall report the gasoline throughput in gallons for each month in the reporting period.

Insignificant Activities

Equipment	Quan.	PTE (tpy)	Regulation Basis
Plasma Cutting tables (see emission unit IA-1)	2	0.37 PM ₁₀ each	Regulation 1.02, section 1.38
Brazing, soldering, or welding Equipment (see emission unit U3)	23	0.21 PM ₁₀ combined; 0.014 total HAPs combined	Regulation 1.02, Appendix A
Machining Equipment (see emission unit U3)	10	0.20 PM ₁₀ combined; 0.013 total HAPs combined	Regulation 1.02, section 1.38
500 gallon diesel fuel storage tank (see emission unit U4)	1	0.01 VOC	Regulation 1.02, Appendix A
One (1) 550 gallon underground Gasoline storage tank with refueling pump (see emission unit U5)	1	1.45 VOC; 0.076 total HAPs	Regulation 1.02, section 1.38

- 1) Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements.
- 2) Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements.
- 3) The owner or operator shall annually submit an updated list of insignificant activities that occurred during the preceding year, with the compliance certification due April 15th.
- 4) Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
- 5) The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions, or use Potential to Emit (PTE) as the annual emissions for each piece of equipment.
- 6) The District has determined that no monitoring, record keeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) unit.

Source-Wide Activities Not Otherwise Regulated¹⁷		
Equipment	Quantity	Reg. Basis
Hand Held Grinders	~20	No Known Regulated Emissions
Machining (Band saw, 1997 HEM Inc.) employing fluids for lubrication or cooling	1	No Known Regulated Emissions

Fee Comment

1. On May 15, 2013, the Board approved revisions to Regulation 2.08, which implemented a new fee structure. As a result, Service Welding & Machine Company, LLC will be required to pay annual fees.
2. The administrative fee in the amount of \$516.52 due to an ownership change on 03 April 2014 is required to be paid prior to the issuance of this permit renewal.
3. The NESHAP (40 CFR 63 Subpart XXXXXX) review fee in the amount of \$516.52 is required to be paid prior to the issuance of this permit renewal.

¹⁷ This table is for informational purposes only. This equipment is exempt from regulation 40 CFR 63 Subpart XXXXXX, per section 63.11522 definitions of dry grinding and machining.

Emission Unit UIA-1: PM Generating Equipment Located at 700 E. Main St.

UIA-1 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.17	Federally Enforceable District Origin Operating Permits	All
7.08	Standards of Performance for New Process Operations	All

UIA-1 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
E5	Two (2) Plasma Cutting Tables	7.08	N/A	N/A	2008

UIA-1 Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. PM/PM₁₀

- i. For emission point E5 (plasma cutting tables): The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr for each plasma cutting table, based on actual operating hours in a calendar day. (Regulation 7.08, section 3.1.2)
- ii. See the Plant wide emission unit for additional PM₁₀ requirements.

b. Opacity

For emission point E5 (plasma cutting tables): The owner or operator shall not allow visible emissions to equal or exceed 20% opacity¹⁸. (Regulation 7.08, section 3.1.1)

S2. Monitoring and Record Keeping (Regulation 2.17, section 5.2)

a. PM/PM₁₀

- i. There are no monitoring or record keeping requirements for emission point E5 (plasma cutting tables) related to the lb/hr PM emission standard.
- ii. See the Plant wide emission unit for additional PM₁₀ requirements.

b. Opacity

There are no opacity monitoring or recordkeeping requirements.

S3. Reporting (Regulation 2.17, section 5.2)

a. PM/PM₁₀

- i. There are no reporting requirements for emission point E5 (plasma cutting tables) related to the lb/hr PM emission standard.
- ii. See the Plant wide emission unit for additional PM₁₀ requirements.

b. Opacity

There are no opacity reporting requirements.

¹⁸ The District has determined that this equipment is not expected to exceed the opacity standard, therefore, there are no monitoring, record keeping, or reporting requirements.