Louisville Metro Air Pollution Control District

701 West Ormsby Ave. Suite 303, Louisville, Kentucky 40203
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Federally Enforceable District Origin Operating Permit Statement of Basis

Company: U.S. Army Corp of Engineers – Physical Support Branch

Plant Location: 2605 Shippingport Drive, Louisville, Kentucky 40212

Date Application Received: 22 December 2010; 18 September 2014

Date of Draft Permit: 07 May 2016

District Engineer: Elise Venard **Permit No:** O-0493-16-F

Plant ID: 0493 **SIC Code:** 3731 **NAICS**: 336611

Introduction:

This permit will be issued pursuant to District Regulation 2.17- *Federally Enforceable District Origin Operating Permits*. Its purpose is to limit the plant wide potential emission rates from this source to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements.

Jefferson County is classified as an attainment area for lead (Pb), nitrogen dioxide (NO_2), carbon monoxide (CO), 1 hr and 8 hr ozone (O_3), and particulate matter less than 10 microns (PM_{10}); is a non-attainment area for the 1997 standard for particulate matter less than 2.5 microns ($PM_{2.5}$) and is a unclassifiable area for the 2012 standard for particulate matter less than 2.5 microns ($PM_{2.5}$) and partial non-attainment for sulfur dioxide (SO_2).

Application Type/Permit Activity:
[ ] Initial Issuance

[X] Permit Revision
- [ ] Administrative
- [ ] Minor
- [X] Significant

[X] Permit Renewal

Compliance Summary:
[ ] Compliance certification signed
[ ] Source is out of compliance
[ ] Compliance schedule included
[X] Source is operating in compliance

I. Source Information

1. Product Description: U.S. Army Corp of Engineers – Physical Support Branch is a refurbishing and repair station for various ships belonging to the U.S. Army Corp of Engineers; they also maintain the locks and dam gates. The facility consists of one mobile surface coating operation, one mobile abrasive blast cleaning operation, and several welding units.

2. Process Description: At the physical support branch, ships are floated into the shipyard to be evaluated for physical compliance and repaired onsite.

3. Site Determination: There are no other facilities that are contiguous or adjacent to this facility

4. Emission Unit Summary:

Emission Unit	Equipment Description
Plant-wide	Plant-wide requirements
U1	One (1) Surface Coating Operation consisting of 3 mobile paint sprayers and Epoxy and Polyamide coating applied by handheld brushes; and one (1) Abrasive Blast Cleaning Operation consisting of 2 mobile abrasive blasting units.
U2	Two (2) diesel-powered welding units.
I.A.-1	Three (3) plasma cutters with electric motors, sixteen (16) welding units with electric motors, three (3) welding units with diesel engines
I.A.-2	Three (3) Non-Emergency Diesel Engines for welding units
I.A.-3	Four (4) diesel-powered emergency generators

5. Fugitive Sources: The fugitive sources identified by the source are the painting, welding, plasma cutting and abrasive blasting units.

6. Permit Revisions:

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
NA	34-04-F	3/31/2006	12/4/2005	Initial	Entire Permit	Initial Permit Issuance
R1	34-04-F (R1)	3/31/2006	12/4/2005	Administrative	Entire Permit	Change in designated Responsible Official

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
NA	O-0493-16-F	7/14/2016	5/9/2016	Renewal	Entire Permit	Scheduled permit renewal; Incorporation of STAR exempt status and construction permit.

7. Construction Permit History:

Permit No.	Issue Date	Description
TBA	TBA	Installation of 2 welding units with diesel engines

8. Emission Summary:

Pollutant	District Calculated PTE (tn/yr) 2007 EI Data	Pollutant that triggered Major Source Status (based on 2015 PTE)
CO	0	No
NO_x	0	No
SO_2	0	No
PM_{10}	0	Yes
VOC	0.017	No
Total HAPs	0	Yes
Single HAP (xylene)	0	Yes

9. Applicable Requirements:

[ ] PSD [X] 40 CFR 60 [X] SIP [X] 40 CFR 63
[ ] NSR [ ] 40 CFR 61 [X] District-Origin [ ] Other

10. MACT Requirements: The source has no future MACT requirements.

11. Referenced Federal Regulations in Permit:

40 CFR 60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI-ICE)
40 CFR 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)

II. Regulatory Analysis

1. Acid Rain Requirements: U.S. Army Corp of Engineers – Physical Support Branch is not subject to the Acid Rain Program.

2. Stratospheric Ozone Protection Requirements: Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. U.S. Army Corp of Engineers – Physical Support Branch does not manufacture, sell, or distribute any of the listed chemicals. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.

3. Prevention of Accidental Releases 112(r): U.S. Army Corp of Engineers – Physical Support Branch does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, *Chemical Accident Prevention Provisions*, in a quantity in excess of the corresponding specified threshold amount.

4. 40 CFR Part 64 Applicability Determination: U.S. Army Corp of Engineers – Physical Support Branch is not subject to 40 CFR Part 64 - *Compliance Assurance Monitoring for Major Stationary Sources*.

5. Basis of Regulation Applicability

a. **Plant-wide**

This source is a potential major source for the pollutant PM_{10}, total HAPs and single HAPs (xylene and MIBK. Regulation 2.17 – F*ederally Enforceable District Origin Operating Permits* establishes requirements to limit the plant wide potential emission rates to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements.

Regulation 2.17, section 5.1 allows the District to incorporate operational limits into the permit. This source requested a plant-wide emission limit of 25 tons per year for criteria pollutants, 12.5 tons per year for Total HAPs,

and 5 tons per year for the largest individual HAPs to be a FEDOOP. The source is not major for Greenhouse Gases.

Regulation 2.17, section 5.2, requires monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit. The owner or operator shall maintain all the required records for a minimum of 5 years and make the records readily available to the District upon request.

Regulation 2.17, section 7.2, requires stationary sources for which a FEDOOP is issued shall submit an Annual Compliance Certification by April 15, of the following calendar year. In addition, as required by Regulation 2.17, section 5.2, the source shall submit an Annual Compliance Report to show compliance with the permit, by March 1 of the following calendar year. Compliance reports and compliance certifications shall be signed by a responsible official and shall include a certification statement per Regulation 2.17, section 3.5.

b. **Emission Unit U1 –** Surface Coating Operation and Abrasive Blast Cleaning Operation

i. **Equipment:**

P/PE	Description	Capacity	Install Date	Applicable Regulation	Basis for Applicability
Paint Booth (a)	Binks, 83-5302	1 gallon/hr	1994	2.17, 7.08, 7.59	Regulation 1.14 provides for the control of fugitive particulate emissions for any source. Regulation 2.17 applies to any stationary source, or one or more processes or process equipment at a stationary source, for which the owner or operator voluntarily applies for a federally enforceable District origin operating permit. The District shall establish requirements and specific conditions that limit source PTE to below Title V standards. Regulation 7.08 establishes the requirements for PM emissions from new processes that commence construction after September 1, 1976. Regulation 7.59 establishes
Paint Booth (b)	Binks, 86-940	1 gallon/hr	1994		
Paint Booth (c)	Graco, Ultra Max II 695	1 gallon/hr	1994		
Painting (IA)	Epoxy and Polyamide coating applied by handheld brushes	1 gallon/hr	N/A		
Blaster 1	Sandstorm, FPRB-26-15F 76	540 lb/hr	1976	1.14, 2.17, 7.08	

P/PE	Description	Capacity	Install Date	Applicable Regulation	Basis for Applicability
Blaster 2	A-BEC, 892452-117	540 lb/hr	1989		coating VOC content standards for affected facilities constructed on or after May 20, 1981 for the surface coating of miscellaneous metal parts.

ii. **Standards/Operating Limits**

1) **VOC**

(a) Regulation 7.59 establishes coating VOC content standards for affected facilities constructed on or after May 20, 1981 for the surface coating of miscellaneous metal parts.

2) **PM/PM_{10}**

(a) The emission standard for PM at each emission point with a process throughput of less than 30 tn/hr is determined in accordance with Regulation 7.08, section 3.1.2 as follows:

PM lb/hr limit = 3.59 (process weight tn/hr)$^{0.62}$

3) **Opacity**

(a) Regulation 7.08, section 3.1.1 establishes an opacity standard of less than 20%, for processes that commenced construction after September 1, 1976.

c. **Emission Unit U2 –** Equipment with Compression-Ignition Engines

i. **Equipment:**

P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
Welder 18(a)	1.0 lb/hr	4/2007	2.17, 7.08	Regulation 2.17 applies to any stationary source, or one or more processes or process equipment at a stationary source, for which the owner or operator voluntarily applies for a federally enforceable
Welder 19(a)	1.0 lb/hr	4/2007		

P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
Welder 18(b) engine	65-hp	4/2007	2.17; 40 CFR Part 60. Subpart IIII; 40 CFR Part 63, Subpart ZZZZ	District origin operating permit. The District shall establish requirements and specific conditions that limit source PTE to below Title V standards. Regulation 7.08 establishes the requirements for PM emissions from new processes that commence construction after September 1, 1976. Regulation 40 CFR 60 Subpart IIII applies to stationary compression-ignition internal combustion engines that commenced construction after July 11, 2005 and were manufactured after April 1, 2006, and are not fire pump engines 40 CFR Part 63, Subpart ZZZZ applies to existing, new, and reconstructed stationary internal combustion engines operating at major and area sources of HAP.
Welder 19(b) engine	65-hp	4/2007		

ii. **Standards/Operating Limits**

1) **NO_x/PM/CO/NMHC**

(a) Regulation 40 CFR Part 60, Subpart IIII establishes emission standards to existing, new, and reconstructed stationary internal combustion engines. When the engines are located at the same site for more than 12 consecutive months at time they are considered stationary and no longer mobile.

2) **HAP**

(a) Regulation 40 CFR Part 63, Subpart ZZZZ establishes emission standards to existing, new, and reconstructed stationary internal combustion engines. When the engines are located at the same site for more than 12 consecutive months at time they are considered stationary and no longer mobile.

3) **PM/PM_{10}**

(a) The emission standard for PM at each emission point with a process throughput of less than 30 tn/hr is determined in accordance with Regulation 7.08, section 3.1.2 as follows:

PM lb/hr limit = 3.59 (process weight tn/hr)$^{0.62}$

4) **Opacity**

(a) Regulation 7.08, section 3.1.1 establishes an opacity standard of less than 20%, for processes that commenced construction after September 1, 1976.

iii. **Monitoring and Record Keeping**

1) **NO_x/PM/CO/NMHC**

(a) Regulation 40 CFR Part 60, Subpart IIII establishes the monitoring and record keeping requirements for the compression-ignition engines associated with this Emission Unit.

2) **HAP**

(a) Regulation 40 CFR Part 63, Subpart ZZZZ establishes the monitoring and record keeping requirements for stationary reciprocating internal combustion engines.

iv. **Reporting**

1) **HAP**

(a) Regulation 40 CFR Part 63, Subpart ZZZZ establishes the reporting requirements for stationary reciprocating internal combustion engines.

III. Other Requirements

1. Temporary Sources: The source did not request to operate any temporary facilities.

2. Short Term Activities: The source did not report any short term activities.

3. Emissions Trading: N/A

4. Operational Flexibility: The source did not request any operation flexibility.

5. Compliance History:

Incid. #	Date	Regulation Violated	Settlement
00695	5/02/94	Regulation 2.03, section 01, Permit required to operate	Agreement with fine 8/30/94
00794	4/15/94	Regulation 2.03, section 01, Permit required to operate	Agreement with fine 8/30/94
00795	4/15/94	Regulation 2.03, section 01, Permit required to operate	Agreement with fine 8/30/94
05458	3/04/10	Regulation 2.17, section 03, Failure to Comply with FEDOOP Permit	Agreement with fine 4/13/10

6. Calculation Methodology or Other Approved Method:

VOC Emissions:

1) The owner or operator shall calculate VOC emissions from the surface coating operation consisting of Paint booth (a), Paint booth (b), Paint booth (c), and any solvent paint cleanup by using the formulas shown below, unless another method is approved in writing by the District:

$E_{\text{Paint VOC}}$ = (X) (paint density lb/gallon)(VOC content %)

Where: E_{VOC} = VOC emissions (pounds) during a one month period
X = the amount of paint (gallons) used in the surface coating unit during the one month period.

OR,

$E_{\text{solvent VOC}}$ = (X) (VOC content lb/gallon)

Where: E_{VOC} = VOC emissions (pounds) during a one month period
X = the amount of solvent (gallons) used in the surface coating unit during the one month period.

2) The owner or operator shall calculate the monthly VOC emissions from the diesel engines Welder 18(b) and Welder 19(b) by utilizing the formula shown below, unless another method is approved in writing by the District:

$E_{\text{Engine VOC}}$ = (X) (0.137 MMBtu/gallon)(0.36 lb/MMBtu)

Where: E_{VOC} = VOC emissions (pounds) during a one month period
X = the amount of diesel fuel (gallons) used in the engine during the one month period.

3) The owner or operator shall account for the minor 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.

(a) District calculated VOC PTE for the Hand painting is 3.83 pound/month

(b) District calculated VOC PTE for welding unit engines Welder 14(b), Welder 15(b) and Welder 16(b) is 34.5 pounds per month each.

(c) District calculated VOC PTE for Emergency generator 1 is 21 pounds per month.

(d) District calculated VOC PTE for Emergency generators 2 and 4 is 14 pounds per month each.

(e) District calculated VOC PTE for Emergency generator 3 is 49.17 pounds per month.

HAP Emissions:

4) The owner or operator shall calculate the monthly individual HAP emissions from the surface coating operation consisting of Paint booth (a), Paint booth (b), and Paint booth (c) by using the formula shown below, unless another method is approved in writing by the District:

$E_{\text{single HAP}}$ = (X) (paint density lb/gallon)(Y)

Where: $E_{\text{single HAP}}$ = individual HAP emissions (lbs) during a one month period

X = the amount of paint (gallons) used in the surface coating unit during the one month period.

Y = individual HAP content % as detailed in the MSD sheet for the coating material

5) The owner or operator shall calculate the monthly total HAP emissions from the surface coating operation consisting of Paint booth (a), Paint booth (b), and Paint booth (c) by summing the monthly individual HAP emissions utilizing the formula shown below, unless another method is approved in writing by the District:

$E_{\text{total HAP}} = \Sigma (X_i)$

Where: $E_{\text{total HAP}}$ = total HAP emissions (lbs) during a one month period

X_i = the monthly total emission for each individual HAP

6) The owner or operator shall calculate individual HAP emissions from the welding units Welder 18(a) and Welder 19(a) utilizing the formula shown below, unless another method is approved in writing by the District:

$E_{\text{single HAP}}$ = (X lb/month) (Y) (Z)

Where: $E_{\text{single HAP}}$ = individual HAP emissions (lbs) during a one

month period
X = the amount of welding wire used during the month
Y = individual HAP content % of the wire as found in the MSD sheet for the material
Z = the Emission Factors for Welding Operations, electrode type E7018, is 18.4 lbs PM_{10}/1000 lbs. electrode consumed

7) The owner or operator shall calculate the monthly total HAP emissions from the welding units Welder 18(a) and Welder 19(a) by summing the monthly individual HAP emissions utilizing the formula shown below, unless another method is approved in writing by the District:

$E_{\text{total HAP}} = \Sigma (X)$

Where: $E_{\text{total HAP}}$ = total HAP emissions (lbs) during a one month period
X = the monthly total emission for each individual HAP

8) The owner or operator shall calculate the monthly individual HAP emissions from the diesel engines Welder 18(b) and Welder 19(b) utilizing the formula shown below, unless another method is approved in writing by the District:

$E_{\text{single HAP}} = (X)\ (0.137\ \text{MMBtu/gallon})(Y\ \text{lb/MMBtu})$

Where: $E_{\text{single HAP}}$ = individual HAP emissions (pounds) during a one month period
X = the amount of diesel fuel (gallons) used in the engine during the one month period.
Y = Emission factor for individual HAPs in diesel fuel (see AP 42, Chapter 3, Section 3, Table 3.3-2)

9) The owner or operator shall calculate the monthly total HAP emissions from the diesel engines Welder 18(b) and Welder 19(b) by summing the individual HAP emissions utilizing the formula shown below, unless another method is approved in writing by the District:

$E_{\text{total HAP}} = \Sigma (X_i)$

Where: $E_{\text{total HAP}}$ = total HAP emissions (lbs) during a one month period
X_i = the monthly total emission for each individual HAP

10) The owner or operator shall account for the minor single 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 single HAP emissions as the monthly emissions.
   (a) District calculated individual HAP PTE for plasma cutting unit 1, cutting unit 2, and cutting unit 3 is 42.94 pounds per month Chromium each.
   (b) District calculated individual HAP PTE for welding units 1 through 17, unit 20 and unit 21 is 0.75 pounds per month Manganese each.
   (c) District calculated HAP PTE for diesel engines 14(b), 15(b), and 16(b) is 0.125 pounds per month Formaldehyde each.
   (d) District calculated HAP PTE for emergency generator 1 is 0.077 pounds per month Formaldehyde.
   (e) District calculated HAP PTE for emergency generators 2 and 4 is 0.05 pounds per month Formaldehyde each.
   (f) District calculated HAP PTE for emergency generator 3 is 0.17 pounds per month Formaldehyde.

11) The owner or operator shall 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.
   (a) District calculated HAP PTE for welding units 1 through 17, unit 20 and unit 21 is 0.75 pounds per month each.
   (b) District calculated HAP PTE for diesel engines 14(b), 15(b), and 16(b) is 0.42 pounds per month each.
   (c) District calculated HAP PTE for emergency generator 1 is 0.33 pounds per month.
   (d) District calculated HAP PTE for emergency generators 2 and 4 is 0.17 pounds per month each.
   (e) District calculated HAP PTE for emergency generator 3 is 0.67 pounds per month.

PM_{10} Emissions:

12) The owner or operator shall calculate PM_{10} emissions from the surface coating operation consisting of Paint booth (a), Paint booth (b), and Paint booth (c) utilizing the formula shown below, unless another method is approved in writing by the District:

E_{PM} = (X gallon/month) (Y lb/gallon) (Z %solids/100%) (80 %usage/100%) (50 %transfer efficiency)

Where: E_{PM} = PM_{10} emissions (lbs) during a one month period
X = the amount of paint (gallons) used during the month
Y = the paint density
Z = percent solids by weight of the paint

13) The owner or operator shall calculate PM_{10} emissions from the abrasive blast cleaning operation consisting of Blaster 1 and Blaster 2 utilizing the formula shown below, unless another method is approved in writing by the District:

E_{PM} = (X hr./month) (Y lbs. abrasive/hr) (Z)

Where: E_{PM} = PM_{10} emissions (lbs) during a one month period

X = the amount of time used during the month (hrs)

Y = the capacity of the blaster (540 lb/hr)

Z = AP-42 emission factor for coal slag 13 lbs. PM_{10}/1000 lbs. abrasive media

14) The owner or operator shall calculate PM_{10} emissions from the welding units Welder 18(a), and Welder 19(a) utilizing the formula shown below, unless another method is approved in writing by the District:

E_{PM} = (X lb./month) (Y)

Where: E_{PM} = PM_{10} emissions (lbs) during a one month period

X = the amount of welding wire used during the month in pounds

Y = the emission factor for the welding wire from AP 42, 12.19-1 Emission Factors for Welding Operations, electrode type E7018, is 18.4 lbs PM_{10}/1000 lbs. electrode consumed

15) The owner or operator shall calculate PM_{10} emissions from the diesel engines Welder 18(b), and Welder 19(b) utilizing diesel fuel throughput, AP-42, table 3.3-1, Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines (diesel engines less than or equal to 600-hp), and the formula shown below, unless another method is approved in writing by the District:

E_{PM} = (0.31 lb. PM_{10}/MMBtu) (0.139 MMBtu/gal) (X) (1 ton/2000 lb.)

Where: E_{PM} = PM_{10} emissions (lbs) during a one month period

X = the amount of diesel fuel (gallons) combusted, in the cranking engine, during the month

16) The owner or operator shall account for the minor PM_{10} emissions from Insignificant Activities when totaling the monthly plant-wide emissions. Since the emissions are minor the owner or operator may use the potential PM_{10} emissions as the monthly emissions.

(a) District calculated PM_{10} PTE for the plasma cutters Cutter 1, Cutter 2, and Cutter 3 is 226 pound/month each.

(b) District calculated PM_{10} PTE for welding units 1 through 17, unit 20 and unit 21 is 13.5 pounds per month each.

(c) District calculated PM_{10} PTE for diesel engines Welder 14(b), Welder 15(b), and Welder 16(b) is 30.17 pounds per month each.
(d) District calculated PM_{10} PTE for Emergency generator 1 is 18.5 pounds per month.
(e) District calculated PM_{10} PTE for Emergency generators 2 and 4 is 12.33 pounds per month each.
(f) District calculated PM_{10} PTE for Emergency generator 3 is 43 pounds per month.

7. Insignificant Activities

Emission Process	Equipment Description	Quantity	PTE (tpy) each	Applicable Regulation	Regulation Basis
Cutter 1	Hypertherm, model 200 plasma cutter, serial number 200-373	1	PM = 1.356	7.08	Regulation 1.02
Cutter 2	Hypertherm, model 100 plasma cutter, serial number BC 60445	1	PM = 1.356	7.08	Regulation 1.02
Cutter 3	Miller model Spectrum 1000 plasma cutter, serial number LJ170151P	1	PM = 1.356	7.08	Regulation 1.02
Welder 1	Miller, model SRH-303, 3-phase, BC22528, with electric motor	1	PM_{10} = 0.081	7.08	Regulation 1.02
Welder 2	Lincoln, model R3R-500, with electric motor	1	PM_{10} = 0.081	7.08	Regulation 1.02
Welder 3	Airco, model 300, AC-DC square aluminum, with electric motor	1	PM_{10} = 0.081	7.08	Regulation 1.02
Welders 4, 5, 6, 7	Lincoln, model DC-600, with electric motor	4	PM_{10} = 0.081	7.08	Regulation 1.02
Welders 8, 9, 10, 11, 12, 13	Miller, model Dimension 652, with electric motor	6	PM_{10} = 0.081	7.08	Regulation 1.02
Welder 14(a)	Miller, model TrailBlazer 302, serial number LKD20207Q, with diesel engine	1	PM_{10} = 0.081	7.08	Regulation 1.02
Welder 14(b)	Kubota D722, 3-cylinder diesel engine, 5/16/2009, 18.8-hp. Certified	1	PM_{10} = 0.081	7.08	Regulation 1.02
Welder 15(a)	Miller, model TrailBlazer 302 #907548, serial	1	PM_{10} = 0.081	7.08	Regulation 1.02

Emission Process	Equipment Description	Quantity	PTE (tpy) each	Applicable Regulation	Regulation Basis
	number MD04296R, with diesel engine				
Welder 15(b)	Kubota D722, 3-cylinder diesel engine, 2013, 18.8-hp. Certified	1	PM_{10} = 0.081	7.08	Regulation 1.02
Welder 16(a)	Miller, model TrailBlazer 302, serial number LJ460010Q, with diesel engine	1	PM_{10} = 0.081	7.08	Regulation 1.02
Welder 16(b)	Kubota D722, 3-cylinder diesel engine, 5/16/2009, 18.8-hp. Certified	1	PM_{10} = 0.081	7.08	Regulation 1.02
Welder 17	Lincoln, model ARC R3R-500, serial number 01951206060, with electric motor	1	PM_{10} = 0.081	7.08	Regulation 1.02
Welder 20	Miller, model Dynasty 350, with electric motor	1	PM_{10} = 0.081	7.08	Regulation 1.02
Welder 21	Miller, model Dynasty 350, with electric motor	1	PM_{10} = 0.081	7.08	Regulation 1.02
Emergency generator 1	Kohler 150-kW serial number 20-180ROZJ, diesel powered	1	PM_{10} = 0.081	40 CFR Part 63, Subpart ZZZZ	Regulation 1.02
Emergency generator 2	Caterpillar 100-kW, diesel powered	1	NOx = 1.558 CO = 0.336 VOC = 0.126 PM_{10} = 0.111	40 CFR Part 63, Subpart ZZZZ	Regulation 1.02
Emergency generator 3	Caterpillar 350-kW, diesel powered	1	NOx = 1.039 CO = 0.224 VOC = 0.084 PM_{10} = 0.074	40 CFR Part 63, Subpart ZZZZ	Regulation 1.02
Emergency generator 4	Olympian 100-kW, diesel powered	1	NOx = 3.635 CO = 0.783 VOC = 0.295 PM_{10} = 0.258	40 CFR Part 63, Subpart ZZZZ	Regulation 1.02
Heater 1	Wondaire fuel oil heater, model HD-600, serial # 18752, 0.22 MMBtu, mobile (marine shop). Electric except for emergency backup	1	NOx = 0.896	NA	Regulation 1.02

Emission Process	Equipment Description	Quantity	PTE (tpy) each	Applicable Regulation	Regulation Basis
Heater 2	Bryant fuel oil heater #1, model 390A048100, serial # 596799012, 0.1 MMBtu, mobile. Electric except for emergency backup	1	NOx = 0.023	NA	Regulation 1.02
Heater 3	Lennox heater, model LP-20-Lo, 0.14 MMBtu, mobile. Electric except for emergency backup.	1	NOx = 0.032	NA	Regulation 1.02

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.

a. Emission Unit I.A.-1: Cutting and Welding Units

Emission Point	Equipment	Quantity	PTE (tpy)	Applicable Regulations
Cutter 1	Hypertherm, model 200 plasma cutter, with electric motor	1	PM = 1.356	2.17, 7.08
Cutter 2	Hypertherm, model 100 plasma cutter, with electric motor	1	PM = 1.356	2.17, 7.08
Cutter 3	Miller model Spectrum 1000 plasma cutter, with electric motor	1	PM = 1.356	2.17, 7.08

Emission Point	Equipment	Quantity	PTE (tpy)	Applicable Regulations
Welder 1	Miller, model SRH-303, with electric motor	1	PM = 0.081	2.17, 7.08
Welder 2	Lincoln, model R3R-500, with electric motor	1	PM = 0.081	2.17, 7.08
Welder 3	Airco, model 300, with electric motor	1	PM = 0.081	2.17, 7.08
Welder 4	Lincoln, model DC-600, with electric motor	1	PM = 0.081	2.17, 7.08
Welder 5	Lincoln, model DC-600, with electric motor	1	PM = 0.081	2.17, 7.08
Welder 6	Lincoln, model DC-600, with electric motor	1	PM = 0.081	2.17, 7.08
Welder 7	Lincoln, model DC-600, with electric motor	1	PM = 0.081	2.17, 7.08
Welder 8	Miller, model Dimension 652, with electric motor	1	PM = 0.081	2.17, 7.08
Welder 9	Miller, model Dimension 652, with electric motor	1	PM = 0.081	2.17, 7.08
Welder 10	Miller, model Dimension 652, with electric motor	1	PM = 0.081	2.17, 7.08
Welder 11	Miller, model Dimension 652, with electric motor	1	PM = 0.081	2.17, 7.08
Welder 12	Miller, model Dimension 652, with electric motor	1	PM = 0.081	2.17, 7.08
Welder 13	Miller, model Dimension 652, with electric motor	1	PM = 0.081	2.17, 7.08
Welder 14(a)	Miller, model Trailblazer 302, with diesel engine	1	PM = 0.081	2.17, 7.08
Welder 15(a)	Miller, model Trailblazer 302, with diesel engine	1	PM = 0.081	2.17, 7.08
Welder 16(a)	Miller, model Trailblazer 302, with diesel engine	1	PM = 0.081	2.17, 7.08
Welder 17	Lincoln, model ARC R3R-500, with electric motor	1	PM = 0.081	2.17, 7.08
Welder 20	Miller, model Dynasty 350, with electric motor	1	PM = 0.081	2.17, 7.08

Emission Point	Equipment	Quantity	PTE (tpy)	Applicable Regulations
Welder 21	Miller, model XMT 450, with electric motor	1	PM = 0.081	2.17, 7.08

i. **Standards/Operating Limits**

1) **PM/PM_{10}**

(a) The emission standard for PM at each emission point with a process throughput of less than 30 tn/hr is determined in accordance with Regulation 7.08, section 3.1.2 as follows:

PM lb/hr limit = 3.59 (process weight tn/hr)$^{0.62}$

2) **Opacity**

(a) Regulation 7.08, section 3.1.1 establishes an opacity standard of less than 20%.

b. **Emission Unit I.A.-2: Non-Emergency Diesel Engines**

Emission Point	Equipment	Quantity	PTE (tpy)	Applicable Regulations
Welder 14 (b)	Diesel engine, 24.8 hp	1	NOx = 3.367 largest pollutant	2.17, 40 CFR Part 60, Subpart IIII, 40 CFR Part 63, Subpart ZZZZ
Welder 15 (b)	Diesel engine, 24.8 hp	1	NOx = 3.367 largest pollutant	
Welder 16 (b)	Diesel engine, 24.8 hp	1	NOx = 3.367 largest pollutant	

i. **Standards/Operating Limits**

1) **NO_x/PM/CO/NMHC**

(a) Regulation 40 CFR Part 60, Subpart IIII establishes emission standards to existing, new, and reconstructed stationary internal combustion engines. When the engines are located at the same site for more than 12 consecutive months at time they are considered stationary and no longer mobile.

2) **HAP**

(a) Regulation 40 CFR Part 63, Subpart ZZZZ establishes emission standards to existing, new, and reconstructed stationary internal combustion engines. When the engines are located at the same site for more than 12 consecutive months at time they are considered stationary and no longer mobile.

ii. **Monitoring and Record Keeping**

1) **NO_x/PM/CO/NMHC**

(a) Regulation 40 CFR Part 60, Subpart IIII establishes the monitoring and record keeping requirements for the compression-ignition engines associated with this Emission Unit.

2) **HAP**

(a) Regulation 40 CFR Part 63, Subpart ZZZZ establishes the monitoring and record keeping requirements for stationary reciprocating internal combustion engines.

iii. **Reporting**

1) **HAP**

(a) Regulation 40 CFR Part 63, Subpart ZZZZ establishes the reporting requirements for stationary reciprocating internal combustion engines.

c. **Emission Unit I.A.-3: Emergency Generators**

Emission Point	Equipment	Applicable Regulation	Quantity	PTE (tpy)
E. Generator 1	Kohler, 150 kW (201 hp) emergency diesel power generator	40 CFR 63, Subpart ZZZZ	1	NOx = 1.558 CO = 0.336 VOC = 0.126 PM_{10} = 0.111
E. Generator 2	Caterpillar, 100 kW (134 hp) emergency diesel power generator	40 CFR 63, Subpart ZZZZ	1	NOx = 1.039 CO = 0.224 VOC = 0.084 PM_{10} = 0.074

Emission Point	Equipment	Applicable Regulation	Quantity	PTE (tpy)
E. Generator 3	Caterpillar, 350 kW (469 hp) emergency diesel power generator	40 CFR 63, Subpart ZZZZ	1	NOx = 3.635 CO = 0.783 VOC = 0.295 PM_{10} = 0.258
E. Generator 4	Olympian, 100 kW (134 hp) emergency diesel power generator	40 CFR 63, Subpart ZZZZ	1	NOx = 1.039 CO = 0.224 VOC = 0.084 PM_{10} = 0.074

i. **Standards/Operating Limits**

1) **HAP**

(a) Regulation 40 CFR Part 63, Subpart ZZZZ establishes emission standards to existing, new, and reconstructed stationary internal combustion engines. When the engines are located at the same site for more than 12 consecutive months at time they are considered stationary and no longer mobile.

ii. **Monitoring and Record Keeping**

1) **HAP**

(a) Regulation 40 CFR Part 63, Subpart ZZZZ establishes the monitoring and record keeping requirements for stationary reciprocating internal combustion engines.

iii. **Reporting**

1) **HAP**

(a) Regulation 40 CFR Part 63, Subpart ZZZZ establishes the reporting requirements for stationary reciprocating internal combustion engines.