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FEDOOP Permit Revisions/Changes

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

Construction Permit History:

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

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
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
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 9440-0.
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

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
1.09	Prohibition of Air Pollution

Regulation	Title
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
Suite 303
701 West Ormsby Ave
Louisville, KY 40203-3137*

Emission Unit Plant-wide

Plant-wide Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.14	Control of Fugitive Particulate Emissions	2.4
2.17	Federally Enforceable District Origin Operating Permits	5.1, 5.2
5.00	Definitions	All

Plant-wide Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. VOC

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

b. HAPs

i. The owner or operator shall not allow or cause the plant-wide emissions of any individual HAP to equal or exceed 5.0 tons during any consecutive 12-month period.² (Regulation 2.17, section 5.1)

ii. The owner or operator shall not allow or cause the plant-wide emissions of all HAPs combined to equal or exceed 12.5 tons during any consecutive 12-month period.³ (Regulation 2.17, section 5.1)

c. PM₁₀

i. The owner or operator shall not allow the plant-wide PM₁₀ emissions to equal or exceed twenty five (25) tons during any consecutive twelve (12) month period.⁴ (Regulation 5.00, section 1.13.5.1)

ii. No owner or operator shall cause or permit the discharge of visible fugitive emissions beyond the lot line of the property on which the emissions originate. (Regulation 1.14, section 2.4)

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.

¹ This facility has a calculated PTE for VOC of 78 tons per year from the emission units. Opting to become a synthetic minor source and limiting VOC emissions to 25 tpy allows this facility to avoid STAR requirements.

² This facility has the potential to be a major source for combined HAPs with a PTE of 49 tons per year. Opting to become a synthetic minor source and limiting total combined HAP emissions to 12.5 tpy allows this facility to avoid both Major status and STAR requirements.

³ This facility has the potential to be a major source for individual HAPs xylene and MIBK with PTEs of 32 and 18 tons per year respectively. Opting to become a synthetic minor source and limiting individual HAP emissions to 5.0 tpy allows this facility to avoid both Major status and STAR requirements.

⁴ This facility has a calculated PTE for PM₁₀ of 92 tons per year from the emission units. Opting to become a synthetic minor source and limiting PM₁₀ emissions to 25 tpy allows this facility to avoid STAR requirements.

a. **VOC**

- i. The owner or operator shall maintain monthly records of the name, quantity used, and VOC content of any VOC-containing material used during each calendar month and consecutive 12-month period.
- ii. The owner or operator shall maintain monthly records of the quantity of diesel fuel used per engine during each calendar month and consecutive 12-month period.
- iii. The owner or operator shall maintain a copy of the material safety data sheet (MSDS/SDS) for each VOC-containing material used at this plant.
- iv. 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:

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

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,

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

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.

- v. 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:

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

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.

- vi. 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.

- 1) District calculated VOC PTE for the Hand painting is 3.83 pound/month
- 2) 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.
- 3) District calculated VOC PTE for Emergency generator 1 is 21 pounds per month.
- 4) District calculated VOC PTE for Emergency generators 2 and 4 is 14 pounds per month each.
- 5) District calculated VOC PTE for Emergency generator 3 is 49.17 pounds per month.

b. HAPs

- i. The owner or operator shall maintain monthly records of the name, quantity used, and HAP content of any HAP-containing material used during each calendar month and consecutive 12-month period.
- ii. The owner or operator shall maintain monthly records of the quantity of diesel fuel used per engine during each calendar month and consecutive 12-month period.
- iii. The owner or operator shall maintain a copy of the material safety data sheet (MSDS/SDS) for each HAP-containing material used at this plant.
- iv. 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:

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

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

- v. 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 from S2.b.iv 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

- vi. 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:

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

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

- vii. 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 from S2.b.vi 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

- viii. 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)

- ix. 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 from S2.b.viii 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

- x. 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.
- 1) 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.
 - 2) District calculated individual HAP PTE for welding units 1 through 17, unit 20 and unit 21 is 0.75 pounds per month Manganese each.
 - 3) District calculated HAP PTE for diesel engines 14(b), 15(b), and 16(b) is 0.125 pounds per month Formaldehyde each.
 - 4) District calculated HAP PTE for emergency generator 1 is 0.077 pounds per month Formaldehyde.
 - 5) District calculated HAP PTE for emergency generators 2 and 4 is 0.05 pounds per month Formaldehyde each.
 - 6) District calculated HAP PTE for emergency generator 3 is 0.17 pounds per month Formaldehyde.
- xi. 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.
- 1) District calculated HAP PTE for welding units 1 through 17, unit 20 and unit 21 is 0.75 pounds per month each.
 - 2) District calculated HAP PTE for diesel engines 14(b), 15(b), and 16(b) is 0.42 pounds per month each.
 - 3) District calculated HAP PTE for emergency generator 1 is 0.33 pounds per month.
 - 4) District calculated HAP PTE for emergency generators 2 and 4 is 0.17 pounds per month each.
 - 5) District calculated HAP PTE for emergency generator 3 is 0.67 pounds per month.
- xii. The owner or operator shall maintain monthly records, including calculations, which show the HAP emissions during each calendar month and consecutive 12-month period.

c. **PM₁₀**

- i. The owner or operator shall calculate PM₁₀ 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:

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

Where: E_{PM} = PM₁₀ 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

- ii. For each operating day, the owner or operator shall maintain the following records
- 1) The date of each abrasive blast cleaning job;
 - 2) The start and stop time of each job; and
- iii. The owner or operator shall calculate PM₁₀ 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:

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

Where: E_{PM} = PM₁₀ 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. PM₁₀/1000 lbs. abrasive media

- iv. The owner or operator shall calculate PM₁₀ 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:

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

Where: E_{PM} = PM₁₀ 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 PM₁₀/1000 lbs. electrode consumed

- v. The owner or operator shall calculate PM₁₀ 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:

$$E_{PM} = (0.31 \text{ lb. PM}_{10}/\text{MMBtu}) (0.139 \text{ MMBtu/gal}) (X) (1 \text{ ton}/2000 \text{ lb.})$$

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

- vi. 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.
 - 1) District calculated PM_{10} PTE for the plasma cutters Cutter 1, Cutter 2, and Cutter 3 is 226 pound/month each.
 - 2) District calculated PM_{10} PTE for welding units 1 through 17, unit 20 and unit 21 is 13.5 pounds per month each.
 - 3) 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.
 - 4) District calculated PM_{10} PTE for Emergency generator 1 is 18.5 pounds per month.
 - 5) District calculated PM_{10} PTE for Emergency generators 2 and 4 is 12.33 pounds per month each.
 - 6) District calculated PM_{10} PTE for Emergency generator 3 is 43 pounds per month.
- vii. The owner or operator shall maintain monthly records, including calculations that show the plant-wide monthly PM_{10} emissions during each calendar month and consecutive 12-month period.

S3. Reporting (Regulation 2.17, section 5.2)

a. VOC

- i. The owner or operator shall report the monthly VOC emissions during each calendar month in the reporting period and consecutive 12 month period.
- ii. If no permit deviations occur during a reporting period the report shall state a negative declaration.

b. HAPs

- i. The owner or operator shall report the monthly individual HAP emissions during each calendar month in the reporting period and consecutive 12 month period.
- ii. The owner or operator shall report the monthly combined HAP emissions during each calendar month in the reporting period and consecutive 12 month period.
- iii. If no deviations occur during a reporting period the report shall state a negative declaration.

c. PM₁₀

- i. The owner or operator shall report the monthly PM₁₀ emissions during each calendar month for each month in the reporting period and consecutive 12 month period.
- ii. If no deviations occur during a reporting period the report shall state a negative declaration.

Emission Unit U1: Surface Coating Operation and Abrasive Blast Cleaning Operation**U1 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.14	Control of Fugitive Particulate Emissions	2.1.3, 2.4
2.17	Federally Enforceable District Origin Operating Permits	5.1, 5.2
7.08	Standards of Performance for New Process Operations	3.1.1, 3.1.2
7.59	Standard of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations	3.1, 5.2, 6.1, 6.2

U1 Equipment:

Emission Point	Description	Applicable Regulation	Installation Date
Paint Booth (a)	Binks, model 83-5302, mobile paint sprayer	2.17, 7.08, 7.59	1994
Paint Booth (b)	Binks, model 86-940, mobile paint sprayer		1994
Paint Booth (c)	Graco, model Ultra Max II 695, mobile paint sprayer		2013
Blaster 1	Sandstorm Bowen Tools, model FPRB-26-15F76, mobile abrasive blasting unit	1.14, 7.08	1976
Blaster 2	A-BEC, serial number 892452-117, mobile abrasive blasting unit		1989
Painting (IA)	Epoxy and Polyamide coating applied by handheld brushes	2.17 7.59	NA

U1 Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. VOC

Surface Coating Operation (Emission Points: Paint Booth (a), Paint Booth (b), Paint Booth (c) and Painting):

i. The owner or operator shall not exceed 5 tons of VOC emissions per year including all coatings, additives, catalysts, solvents, thinners, and cleaners. (Regulation 7.59, section 5.2)

OR

ii. No coating shall be used with a VOC content, as applied, in excess of the following limits during a calendar month averaging period: (Regulation 7.59, section 3.1)

Coating	VOC lb/gal	VOC kg/l
Clear coatings	4.3	0.52
Air-dried coatings	3.5	0.42
Extreme performance coatings	3.5	0.42
All other coatings	3.0	0.36

b. HAPs

i. The owner or operator shall not use any spray application coatings, additives, catalyst, solvents, or thinners containing target HAP 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.⁵

ii. For HAP standards see Emission Unit Plant-wide.

⁵ The equipment or processes covered by this permit are not currently subject to the standards of the NESHAP, 40 CFR 63 subpart HHHHHH, due to the absence of the aforementioned chemicals in the spray coatings and paint stripping compounds. As defined in 40 CFR 63 subpart HHHHHH, a target HAP containing coating is a coating containing concentrations that are greater than the following: 0.1% (by mass) hexavalent chromium, 1.0% (by mass) trivalent chromium, 0.1% (by mass) lead, 1.0% (by mass) manganese, 0.1% (by mass) nickel, or 0.1% (by mass) cadmium.

c. **PM**Surface Coating Operation:

- i. The owner or operator shall not allow or cause the PM emissions to exceed 2.34 pounds per hour for each coating operation.⁶ (Regulation 7.08, 3.1.2)
- ii. The owner or operator shall operate and maintain emission filters and containment methods at all times the paint booth is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice to meet the standard.. (Regulation 7.08, section 3.1.2)

Abrasive Blast Cleaning Operation:

- iii. The owner or operator shall use adequate containment methods such as a tarp or equivalent system to prevent particulate matter from becoming airborne beyond the plant site. (Regulation 1.14, section 2.1.3)(Permit 34-04-F (R1))
- iv. The owner or operator shall not cause or permit the discharge of visible fugitive emissions beyond the lot line of the property on which the emissions originate. (Regulation 1.14, section 2.4)(Permit 34-04-F (R1))
- v. The owner or operator shall not allow or cause the PM emissions to exceed 2.34 pounds per hour from each sand blasting unit. (Regulation 7.08, section 3.1.2)
- vi. The owner or operator shall not operate the sand blasting equipment for more than 30 minutes during any consecutive 60 minute period.⁷ (Regulation 7.08, section 3.1.2)(Permit 34-04-F (R1))
- vii. For additional PM₁₀ standards see Emission Unit Plant-wide.

⁶ The maximum hourly PM emissions from the surface coating operation are 8.26 pounds based on a spray rate of 3 gallons per hour, 45.9% by weight solids, a density of 12 lbs. /gallons, and a transfer rate of 50 percent. (Permit 34-04-F (R1))

⁷ Based on a maximum usage rate of 540 pounds per hour of abrasive blasting media from each sand blasting unit and AP-42 emission factors, the potential uncontrolled PM emissions are greater than the emission standard in Regulation 7.08. To assure continued compliance with the hourly PM emission standard, the company is limited to operating the equipment for 30 minutes each hour and using adequate containment methods to minimize the emissions of PM. The potential uncontrolled annual emissions are 61.5 tons based on the AP-42 emission factor of 13 lb. PM10 per 1,000 pounds of abrasive blast media (coal slag) used. (Permit 34-04-F (R1))

d. **Opacity**

The owner or operator shall not allow or cause visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

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

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

a. **VOC**

Surface Coating Operation:

- i. The owner or operator shall maintain monthly records of the name, quantity used, and VOC content of any VOC-containing material used during each calendar month and consecutive 12-month period.
 - 1) The owner or operator shall maintain copies of the MSD/SDS sheets for all VOC-containing materials used in this Emission Unit.
 - 2) The owner or operator shall record the date, or usage record period, for each application of coating and solvent
 - 3) The owner or operator shall record the application method and substrate type (metal, plastic, etc.)
 - 4) The owner or operator shall record the amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used during the averaging period.⁸
 - 5) The owner or operator shall record 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 (month).
 - 6) The owner or operator shall record the VOC content, as applied, in each coating, solvent or other materials used in this operation.
- ii. The owner or operator shall maintain monthly records of the amount of VOC containing materials used in the paint booths for each month and 12 consecutive month period.
- iii. If the usage rate of VOC containing materials exceeds 1,250 gallons during any consecutive 12-month period, the owner or operator shall calculate the VOC emissions for the calendar month in which the consecutive 12-month 1,250 gallons usage rate was exceeded. The owner

⁸ A list of organic compounds that have been determined by the EPA to have negligible photochemical reactivity and have been deemed excluded compounds can be found in APCD Regulation 1.02, section 1.84

or operator shall then calculate the total VOC emissions for the preceding 11 months to determine if the annual VOC limit of less than 5 tons has been exceeded. The owner or operator shall continue to calculate the monthly and consecutive 12 month plant-wide VOC emissions until such time the consecutive 12-month usage of VOC containing material is 1,250 gallons or less.

- iv. If no permit deviations have occurred a negative statement shall be entered into the record.

b. HAPs

For HAP monitoring and record keeping requirements see Emission Unit Plant-wide.

c. PM

Surface Coating Operation:

- i. The owner or operator shall maintain a monthly maintenance log for the emission filters and containment methods to include all maintenance performed, including dates and duration of any control device downtime or bypasses.
- ii. The owner or operator shall operate and maintain emission filters and containment methods at all times the surface coating operation paint booth is in operation.
- iii. The owner or operator shall maintain daily records that identify all periods of bypassing the emission filters and containment methods while the surface coating operation is in operation. The records shall include:
 - 1) The date, duration (including the start and stop time) of each bypass event,
 - 2) A brief summary of the cause or reason for bypassing the emission filters and containment methods,
 - 3) A description of the corrective action taken to minimize the extent and duration of each bypass event,
 - 4) The lb/hr PM emissions during each bypass event, and
 - 5) A description of the measures implemented to prevent reoccurrence of the situation that resulted in bypassing the emission filters and containment methods.

Abrasive Blast Cleaning Operation:

- iv. For each operating day the owner or operator shall maintain a daily usage log for each abrasive blast cleaner to include:
 - 1) The date, duration (including the start and stop time) of each abrasive blast cleaning job
 - 2) The dates and duration of any operation time limit overages.
 - 3) The lb/hr emissions of PM during each overage event, and
 - 4) Measures implemented to prevent reoccurrence of the situation that resulted in exceeding the 30 minute per each 60 minute time limit.
- v. The owner or operator shall maintain copies of the MSD/SDS sheets for all abrasive aggregate materials used in this Emission Unit.
- vi. For additional PM₁₀ monitoring and record keeping requirements see Emission Unit Plant-wide.

d. **Opacity**

- i. The owner or operator shall conduct a weekly one-minute visible emissions survey during normal operation. 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.
- ii. 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.
- iii. The owner or operator shall maintain records, weekly, 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 week, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

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

a. **VOC**

Surface Coating Operation:

- i. The owner or operator shall report all periods in the reporting period when permitted conditions or standards were not met, limits were exceeded or monitoring and record keeping requirements were deviated from.
- ii. If no deviations occur during a reporting period the report shall state a negative declaration.
- iii. For additional VOC monitoring and record keeping requirements see Emission Unit Plant-wide.

b. HAPs

Surface Coating Operation:

- i. The owner or operator shall submit notification to the District for approval of any raw material change that includes the HAPs covered by 40 CFR 63 HHHHHH
- ii. For additional HAP reporting requirements see Emission Unit Plant-wide.

c. PM

Surface Coating Operation:

- i. The owner or operator shall report all periods in the reporting period when permitted conditions or standards were not met, lb/hr PM limits were exceeded or monitoring and record keeping requirements were deviated from.
- ii. The owner or operator shall report any corrective action taken for each permit deviation.
- iii. If no deviations or exceedances occur during a reporting period, the report shall state a negative declaration.

Abrasive Blast Cleaning Operation:

- iv. The owner or operator shall report all periods in the reporting period when permitted conditions or standards were not met, lb/hr PM limits were exceeded or monitoring and record keeping requirements were deviated from.
- v. The owner or operator shall report any corrective action taken for each permit deviation.

- vi. If no deviations or exceedances occur during a reporting period, the report shall state a negative declaration.
- vii. For additional PM₁₀ reporting requirements see Emission Unit Plant-wide.

d. **Opacity**

- i. The owner or operator shall report any deviation from the requirement to perform weekly visible emission surveys or Method 9 tests;
- ii. The owner or operator shall report any deviation from the requirement to record the results of each VE survey and Method 9 test performed;
- iii. The owner or operator shall report the number, date, and time of each VE Survey where visible emissions were observed beyond the opacity standard and the results of the Method 9 test performed;
- iv. The owner or operator shall report all periods of exceedance of the opacity standard; and
- v. The owner or operator shall provide a description of any corrective actions taken for each exceedance of the opacity standard; and
- vi. If no deviations from permit requirements occur during a reporting period, the owner or operator shall submit a negative declaration stating that no permit deviations occurred during the reporting period for opacity.

Emission Unit U2: Equipment with Compression-Ignition Engines

U2 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.17	Federally Enforceable District Origin Operating Permits	5.1, 5.2
7.08	Standards of Performance for New Process Operations	3.1.1, 3.1.2
40 CFR Part 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI-ICE)	§60.4200, §60.4204, §60.4211
40 CFR Part 63, Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)	§63.6603, §63.6604, §63.6605, §63.6612, §63.6615, §63.6620, §63.6625, §63.6630, §63.6635, §63.6640, §63.6645, §63.6650, §63.6655

U2 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Installation Date
Welder 18(a)	Miller, model Big Blue air pack, serial number LH014373, with diesel engine	2.17, 7.08	NA	4/2007
Welder 18(b)	Deutz BF4M2011 diesel engine, 63.4-hp. Certified	2.17, 40 CFR Part 60, Subpart IIII, 40 CFR Part 63, Subpart ZZZZ	NA	4/2007
Welder 19(a)	Miller, model Big Blue air pack, serial number LH015168, with diesel engine	2.17, 7.08	NA	4/2007
Welder 19(b)	Deutz BF4M2011 diesel engine, 63.4-hp. Certified	2.17, 40 CFR Part 60, Subpart IIII, 40 CFR Part 63, Subpart ZZZZ	NA	4/2007

U2 Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. Unit Operation (40 CFR Part 60, Subpart IIII)

- i. When the diesel engines are onsite in one place for at least 12 consecutive months then Regulations 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ does apply to the engines. (Regulation 2.17, section 5.1)⁹

For the 63.4 HP engine for each diesel-powered Miller welding machine:

- ii. When the diesel engines are onsite in one place for at least 12 consecutive months then: the owner or operator that must comply with the emission standards specified in 40 CFR Part 60, Subpart IIII shall do all of the following:
- 1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; (40 CFR Part 60, Section 60.4211(a) (1))
 - 2) Change only those emission-related settings that are permitted by the manufacturer; (40 CFR Part 60, Section 60.4211(a) (2))
 - 3) Meet the requirements of 40 CFR Parts 89, 94 and/or 1068, as they apply to you. (40 CFR Part 60, Section 60.4211(a) (3))
 - 4) The owner or operator of the diesel engine associated with the diesel engines must the limit of emissions of PM in the engine exhaust to 0.003 lb. PM/hr.
- iii. The owner or operator shall purchase an engine certified to the emission standards in 40 CFR Part 60, Section 60.4205(b), as applicable for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. (40 CFR Part 60, Section 60.4211(c))
- iv. Engine manufacturers shall certify the engines with the exhaust emission standards in the following table. In lieu of the NO_x standards, NMHC + NO_x standards, and PM standards, manufacturers may elect to include engine families in the averaging, banking, and trading program. The manufacturer must set a family emission limit (FEL) not to exceed the levels contained in the following table: (40 CFR Part 89, Section 89.112)

⁹ If the engines are located on site and in one location for 12 consecutive months at any one time then they are considered stationary and not mobile and the NSPS and MACT for stationary engines will apply.

Table 1: Emission Standards for 63.4 HP engines

unit: g/KW-hr	NO _x	HC	NMHC+ NO _x	CO	PM
Emission Standards	N/A	N/A	4.7	5.0	0.4
Family Emission Limits	N/A	N/A	7.5	N/A	1.2

Fuel requirements:

- v. Beginning October 1, 2010, the owner or operator of a stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that uses diesel fuel shall use diesel fuel that meets the requirements of 40 CFR Part 80, Section 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted: (40 CFR Part 60, Section 60.4207(b))
 - 1) Sulfur content: 15 parts per million (ppm) maximum for NR diesel fuel. (40 CFR Part 80, Section 80.510(b) (1) (i))
 - 2) A minimum cetane index of 40; or (40 CFR Part 80, Section 80.510(b) (2) (i))
 - 3) A maximum aromatic content of 35 volume percent. (40 CFR Part 80, Section 80.510(b) (2) (ii))
- b. **HAP** (40 CFR Part 63, Subpart ZZZZ)

For the 63.4 HP engine for each diesel-powered Miller welding machine:

When the diesel engines are onsite in one place for at least 12 consecutive months then: the owner or operator shall comply with all emission limitations, work practice standards, and operating limits in 40 CFR Part 63, Subpart ZZZZ (See Attachment A).

c. **PM**

For the two (2) Miller welding machines:

- i. The owner or operator shall not cause or allow the emissions of particulate matter to exceed the following limits: (Regulation 7.08, section 3.1.2)¹⁰

Emission Point ID	Equipment	Design Capacity (ton/hr.)	Limit (lb./hr.)

¹⁰ Based on the one time compliance demonstration for this Emission Unit the PM lb/hr emission limit uncontrolled cannot be exceeded, therefore, no PM monitoring, record keeping, or reporting is required to demonstrate compliance with Regulation 7.08.

Emission Point ID	Equipment	Design Capacity (ton/hr.)	Limit (lb./hr.)
Welder 18 (a)	Miller, model Big Blue air pack, serial number LH014373	≤ 0.50	2.34
Welder 19 (a)	Miller, model Big Blue air pack, serial number LH015168	≤ 0.50	2.34

ii. For additional PM₁₀ standards see Emission Unit Plant-wide.

d. Opacity

For the two (2) Miller welding machines:

The owner or operator shall not allow or cause the visible emissions to exceed 20 percent opacity from any one piece of equipment in this emission unit.
(Regulation 7.08, section 3.3.1)

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

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

a. Unit Operation (40 CFR Part 60, Subpart III)

i. The owner or operator shall, monthly, maintain records of any change in location of the engines subject to 40 CFR 63 Subpart ZZZZ or 40 CFR 60 Subpart III, or a declaration that no change in location occurred.

When the diesel engines are onsite in one place for at least 12 consecutive months then (For the 63.4 HP engine for each diesel-powered Miller welding machine) the owner or operator shall comply with following:

ii. If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in § 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

iii. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

- iv. The owner or operator of the diesel engine associated with the equipment must demonstrate compliance by:
 - 1) Maintain copies of the MSD sheets for all maintenance materials used on this Emission Unit.
 - 2) Keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and
 - 3) Must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Fuel requirements:

- v. The owner or operator shall maintain records of the fuel MSD sheets and receipts showing dates, amounts of fuel purchased, sulfur content of fuel purchased and supplier's name and address.

b. **HAP** (40 CFR Part 63, Subpart ZZZZ)

- i. The owner or operator shall, monthly, maintain records of any change in location of the engines subject to 40 CFR 63 Subpart ZZZZ or 40 CFR 60 Subpart IIII, or a declaration that no change in location occurred.

When the diesel engines are onsite in one place for at least 12 consecutive months then (For the 63.4 HP engine for each diesel-powered Miller welding machine) the owner or operator shall comply with following:

- ii. The owner or operator shall comply with all monitoring and record keeping requirements in 40 CFR Part 63, Subpart ZZZZ (See Attachment A).
- iii. For additional HAP monitoring and record keeping requirements see Emission Unit Plant-wide.

c. **PM**

- i. There is no particulate matter compliance monitoring or record keeping for this Emission Unit.
- ii. For additional PM₁₀ monitoring and record keeping requirements see Emission Unit Plant-wide.

d. Opacity

For the two (2) Miller welding machines:

- i. The owner or operator shall conduct a weekly one-minute visible emissions survey, during normal operation, of all the emission points. No more than four emission points shall be observed simultaneously.
- ii. 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.
- iii. The owner or operator shall maintain records, weekly, 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 week, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

S3. Reporting (Regulation 2.17, section 5.2)**a. Unit Operation (40 CFR Part 60, Subpart IIII)**

- i. The owner or operator shall report any change in location of the engines subject to 40 CFR 63 Subpart ZZZZ or 40 CFR 60 Subpart IIII, or a declaration that no change in location occurred.

When the diesel engines are onsite in one place for at least 12 consecutive months then (For the 63.4 HP engine for each diesel-powered Miller welding machine) the owner or operator shall comply with following:

- ii. The owner or operator shall report all periods in the reporting period when permitted conditions or standards were not met, limits were exceeded or monitoring and record keeping requirements were deviated from.
- iii. The owner or operator shall report any corrective action taken for each permit deviation.
- iv. If no deviations or exceedances occur during a reporting period, the report shall state a negative declaration.

- b. **HAP** (40 CFR Part 63, Subpart ZZZZ)
- i. The owner or operator shall report any change in location of the engines subject to 40 CFR 63 Subpart ZZZZ or 40 CFR 60 Subpart IIII, or a declaration that no change in location occurred.

When the diesel engines are onsite in one place for at least 12 consecutive months then (For the 63.4 HP engine for each diesel-powered Miller welding machine) the owner or operator shall comply with following:

- ii. The owner or operator shall comply with all reporting requirements in 40 CFR Part 63, Subpart ZZZZ (See Attachment A).
- iii. For additional HAP reporting requirements see Emission Unit Plant-wide.
- c. **PM**
- i. There is no particulate matter emission compliance reporting for this Emission Unit.
- ii. For additional PM₁₀ reporting requirements see Emission Unit Plant-wide.
- d. **Opacity**

For the two (2) Miller welding machines:

- i. The owner or operator shall report any deviation from the requirement to perform weekly visible emission surveys or Method 9 tests;
- ii. The owner or operator shall report any deviation from the requirement to record the results of each VE survey and Method 9 test performed;
- iii. The owner or operator shall report the number, date, and time of each VE Survey where visible emissions were observed beyond the opacity standard and the results of the Method 9 test performed;
- iv. The owner or operator shall identify all periods of exceedance of the opacity standard; and
- v. The owner or operator shall provide a description of any corrective actions taken for each exceedance of the opacity standard; and
- vi. If no deviations from permit requirements occur during a reporting period, the owner or operator shall submit a negative declaration stating that no permit deviations occurred during the reporting period for opacity.

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 number MD04296R, with diesel engine	1	PM ₁₀ = 0.081	7.08	Regulation 1.02
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

Emission Process	Equipment Description	Quantity	PTE (tpy) each	Applicable Regulation	Regulation Basis
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	NO _x = 1.558 CO = 0.336 VOC = 0.126 PM ₁₀ = 0.111	40 CFR Part 63, Subpart ZZZZ	Regulation 1.02
Emergency generator 2	Caterpillar 100-kW, diesel powered	1	NO _x = 1.039 CO = 0.224 VOC = 0.084 PM ₁₀ = 0.074	40 CFR Part 63, Subpart ZZZZ	Regulation 1.02
Emergency generator 3	Caterpillar 350-kW, diesel powered	1	NO _x = 3.635 CO = 0.783 VOC = 0.295 PM ₁₀ = 0.258	40 CFR Part 63, Subpart ZZZZ	Regulation 1.02
Emergency generator 4	Olympian 100-kW, diesel powered	1	NO _x = 1.039 CO = 0.224 VOC = 0.084 PM ₁₀ = 0.074	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	NO _x = 0.896	NA	Regulation 1.02
Heater 2	Bryant fuel oil heater #1, model 390A048100, serial # 596799012, 0.1 MMBtu, mobile. Electric except for emergency backup	1	NO _x = 0.023	NA	Regulation 1.02
Heater 3	Lennox heater, model LP-20-Lo, 0.14 MMBtu, mobile. Electric except for emergency backup.	1	NO _x = 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.

Insignificant Activity Unit I.A.-1: Cutting and Welding Units**I.A.-1 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.17	Federally Enforceable District Origin Operating Permits	5.1, 5.2
7.08	Standards of Performance for New Process Operations	3.1.1, 3.1.2

I.A.-1 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
Cutter 1	Hypertherm, model 200 plasma cutter, with electric motor	2.17, 7.08	NA	NA	After 9/1976
Cutter 2	Hypertherm, model 100 plasma cutter, with electric motor	2.17, 7.08	NA	NA	After 9/1976
Cutter 3	Miller model Spectrum 1000 plasma cutter, with electric motor	2.17, 7.08	NA	NA	After 9/1976
Welder 1	Miller, model SRH-303 welding unit, with electric motor	2.17, 7.08	NA	NA	After 9/1976
Welder 2	Lincoln, model R3R-500 welding unit, with electric motor	2.17, 7.08	NA	NA	After 9/1976
Welder 3	Airco, model 300 welding unit, with electric motor	2.17, 7.08	NA	NA	After 9/1976
Welder 4	Lincoln, model DC-600 welding unit, with electric motor	2.17, 7.08	NA	NA	After 9/1976
Welder 5	Lincoln, model DC-600 welding unit, with electric motor	2.17, 7.08	NA	NA	After 9/1976
Welder 6	Lincoln, model DC-600 welding unit, with electric motor	2.17, 7.08	NA	NA	After 9/1976
Welder 7	Lincoln, model DC-600 welding unit, with electric motor	2.17, 7.08	NA	NA	After 9/1976
Welder 8	Miller, model Dimension 652 welding unit, with electric motor	2.17, 7.08	NA	NA	After 9/1976
Welder 9	Miller, model Dimension 652 welding unit, with electric motor	2.17, 7.08	NA	NA	After 9/1976
Welder 10	Miller, model Dimension 652 welding unit, with electric motor	2.17, 7.08	NA	NA	After 9/1976
Welder 11	Miller, model Dimension 652 welding unit, with electric motor	2.17, 7.08	NA	NA	After 9/1976

Emission Point	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
Welder 12	Miller, model Dimension 652 welding unit, with electric motor	2.17, 7.08	NA	NA	After 9/1976
Welder 13	Miller, model Dimension 652 welding unit, with electric motor	2.17, 7.08	NA	NA	After 9/1976
Welder 14(a)	Miller, model Trailblazer 302 welding unit, with diesel engine	2.17, 7.08	NA	NA	11/2014
Welder 15(a)	Miller, model Trailblazer 302 welding unit, with diesel engine	2.17, 7.08	NA	NA	7/2014
Welder 16(a)	Miller, model Trailblazer 302 welding unit, with diesel engine	2.17, 7.08	NA	NA	11/2014
Welder 17	Lincoln, model ARC R3R-500 welding unit, with electric motor	2.17, 7.08	NA	NA	After 9/1976
Welder 20	Miller, model Dynasty 350 welding unit, with electric motor	2.17, 7.08	NA	NA	After 9/1976
Welder 21	Miller, model XMT 450 welding unit, with electric motor	2.17, 7.08	NA	NA	After 9/1976

I.A.-1 Specific Conditions**S1. Standards** (Regulation 2.17, section 5.1)**a. PM**

- i. The owner or operator shall not allow or cause the PM emissions to exceed 2.34 pounds per hour combined. (Regulation 7.08, 3.1.2)
- ii. For additional PM₁₀ standards see Emission Unit Plant-wide.

b. Opacity

The owner or operator shall not allow or cause visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

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

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

a. PM

- i. There is no particulate matter compliance monitoring or record keeping for this Emission Unit.¹¹
- ii. For additional PM₁₀ monitoring and record keeping requirements see Emission Unit Plant-wide.

b. Opacity

There is no opacity compliance monitoring or record keeping for this Emission Unit.¹²

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

- i. There is no particulate matter emission compliance reporting Emission Unit.

¹¹ Based on the one time compliance demonstration the equipment in this Emission Unit cannot exceed the lb/hr PM emission limit uncontrolled and combined, therefore, no PM monitoring, record keeping, or reporting is required.

¹² The District does not believe that the equipment in this emission unit would exceed the Opacity limit.

ii. For additional PM₁₀ reporting requirements see Emission Unit Plant-wide.

b. **Opacity**

There is no opacity emission compliance reporting for this Emission Unit.

Insignificant Activity Unit I.A.-2: Non-Emergency Diesel Engines

I.A.-2 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.17	Federally Enforceable District Origin Operating Permits	5.1, 5.2
40 CFR Part 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI-ICE)	§60.4200, §60.4204, §60.4211
40 CFR Part 63, Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)	§63.6603, §63.6604, §63.6605, §63.6612, §63.6615, §63.6620, §63.6625, §63.6630, §63.6635, §63.6640, §63.6645, §63.6650, §63.6655

I.A.-2 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Installation Date
Welder 14(b)	Diesel engine, 24.8 hp	2.17 40 CFR Part 60, Subpart IIII, 40 CFR Part 63, Subpart ZZZZ	NA	11/2014
Welder 15(b)	Diesel engine, 24.8 hp		NA	7/2014
Welder 16(b)	Diesel engine, 24.8 hp		NA	11/2014

I.A.-2 Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. Unit Operation (40 CFR Part 60, Subpart III)

- i. When the diesel engines are onsite in one place for at least 12 consecutive months then Regulations 40 CFR 60 Subpart III and 40 CFR 63 Subpart ZZZZ do apply to the engines. (Regulation 2.17, section 5.1)¹³
- ii. When the diesel engines are onsite in one place for at least 12 consecutive months then: the owner or operator that must comply with the emission standards specified in 40 CFR Part 60, Subpart III shall do all of the following:
 - 1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; (40 CFR Part 60, Section 60.4211(a) (1))
 - 2) Change only those emission-related settings that are permitted by the manufacturer; (40 CFR Part 60, Section 60.4211(a) (2))
 - 3) Meet the requirements of 40 CFR Parts 89, 94 and/or 1068, as they apply to you. (40 CFR Part 60, Section 60.4211(a) (3))
- iii. The owner or operator shall purchase an engine certified to the emission standards in 40 CFR Part 60, Section 60.4205(b), as applicable for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. (40 CFR Part 60, Section 60.4211(c))
- iv. Engine manufacturers shall certify the engines with the exhaust emission standards in the following table. In lieu of the NO_x standards, NMHC + NO_x standards, and PM standards, manufacturers may elect to include engine families in the averaging, banking, and trading program. The manufacturer must set a family emission limit (FEL) not to exceed the levels contained in the following table: (40 CFR Part 89, Section 89.112)

Table 1: Emission Standards for 24.8 HP engines

unit: g/KW-hr	NO _x	HC	NMHC+ NO _x	CO	PM
Emission Standards	N/A	N/A	7.5	6.6	0.8
Family Emission Limits	N/A	N/A	7.5	N/A	1.2

¹³ If the engines are located on site and in one location for 12 consecutive months at any one time then they are considered stationary and not mobile and the NSPS and MACT for stationary engines will apply.

Fuel requirements:

- v. Beginning October 1, 2010, the owner or operator of a stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that uses diesel fuel shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted: (40 CFR 60.4207(b))
 - 1) Sulfur content: 15 parts per million (ppm) maximum for NR diesel fuel. (40 CFR 80.510(b) (1) (i))
 - 2) A minimum cetane index of 40; or (40 CFR 80.510(b) (2) (i))
 - 3) A maximum aromatic content of 35 volume percent. (40 CFR 80.510(b) (2) (ii))
- b. **HAP** (40 CFR Part 60 Subpart ZZZZ)
 - i. When the diesel engines are onsite in one place for at least 12 consecutive months then Regulations 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ does apply to the engines. (Regulation 2.17, section 5.1)¹⁴
 - ii. When the diesel engines are onsite in one place for at least 12 consecutive months then: the owner or operator shall comply with all emission limitations, work practice standards, and operating limits in 40 CFR Part 63, Subpart ZZZZ (See Attachment A).
 - iii. For additional HAP standards see Emission Unit Plant-wide.

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 these records readily available to the District upon request.

- a. **Unit Operation** (40 CFR Part 60, Subpart IIII)
 - i. The owner or operator shall, monthly, maintain records of any change in location of the engines subject to 40 CFR 63 Subpart ZZZZ or 40 CFR 60 Subpart IIII, or a declaration that no change in location occurred.

When the diesel engines are onsite in one place for at least 12 consecutive months then the owner or operator shall comply with following:

¹⁴ If the engines are located on site and in one location for 12 consecutive months at any one time then they are considered stationary and not mobile and the NSPS and MACT for stationary engines will apply.

- ii. If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in § 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.
- iii. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.
- iv. The owner or operator of the diesel engine associated with the equipment must demonstrate compliance by:
 - 1) Maintain copies of the MSD sheets for all maintenance materials used in this Emission Unit.
 - 2) Keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and
 - 3) Must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Fuel requirements:

- v. The owner or operator shall maintain records of the fuel MSD/SDS sheets and receipts showing dates, amounts of fuel purchased, sulfur content of fuel purchased and supplier's name and address.
- b. **HAP** (40 CFR Part 60 Subpart ZZZZ)
- i. The owner or operator shall, monthly, maintain records of any change in location of the engines subject to 40 CFR 63 Subpart ZZZZ or 40 CFR 60 Subpart IIII, or a declaration that no change in location occurred.

When the diesel engines are onsite in one place for at least 12 consecutive months then the owner or operator shall comply with following:

- ii. The owner or operator shall comply with all monitoring and record keeping requirements in 40 CFR Part 63, Subpart ZZZZ (See Attachment A).
- iii. For additional HAP monitoring and record keeping requirements see Emission Unit Plant-wide.

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

a. **Unit Operation** (40 CFR Part 60, Subpart IIII)

- i. The owner or operator shall report any change in location of the engines subject to 40 CFR 63 Subpart ZZZZ or 40 CFR 60 Subpart IIII, or a declaration that no change in location occurred.

When the diesel engines are onsite in one place for at least 12 consecutive months then the owner or operator shall comply with following:

- ii. The owner or operator shall report any deviation from the requirement to keep a maintenance plan.
- iii. The owner or operator shall report any deviation from the requirement to maintain records of conducted maintenance.
- iv. If no deviations occur during an annual reporting period, the report shall state a negative declaration.

Fuel requirements:

- v. The owner or operator shall report any exceedance of the following diesel fuel limits:
- 1) Sulfur content: 15 parts per million (ppm) maximum for NR diesel fuel.
 - 2) A minimum cetane index of 40; or
 - 3) A maximum aromatic content of 35 volume percent.
 - 4) If no deviations occur during an annual reporting period, the report shall state a negative declaration.

b. **HAP** (40 CFR Part 60 Subpart ZZZZ)

- i. The owner or operator shall report any change in location of the engines subject to 40 CFR 63 Subpart ZZZZ or 40 CFR 60 Subpart IIII, or a declaration that no change in location occurred.

When the diesel engines are onsite in one place for at least 12 consecutive months then the owner or operator shall comply with following:

- ii. The owner or operator shall comply with all reporting requirements in 40 CFR Part 63, Subpart ZZZZ (See Attachment A).
- iii. For additional HAP reporting requirements see Emission Unit Plant-wide.

Insignificant Activity Unit I.A.-3: Emergency Generators

I.A.-3 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
40 CFR 63, Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)	§63.6585, §63.6603, §63.6625, §63.6650

I.A.-3 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Installation Date
E. Generator 1	Kohler, 150 kW (201 hp) emergency diesel power generator	2.17 40 CFR 63, Subpart ZZZZ	NA	1994
E. Generator 2	Caterpillar, 100 kW (134 hp) emergency diesel power generator		NA	1994
E. Generator 3	Caterpillar, 350 kW (469 hp) emergency diesel power generator		NA	2001
E. Generator 4	Olympian, 100 kW (134 hp) emergency diesel power generator		NA	2001

I.A.-2 Specific Conditions**S1. Standards** (Regulation 2.17, section 5.2)**a. HAP** (40 CFR Part 60 Subpart ZZZZ)

- i. For an existing stationary CI RICE located at an area source of HAP emissions, the owner or operator shall comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013.¹⁵ (40 CFR 63.6595(a)(1))
- ii. The owner or operator of an existing stationary RICE located at an area source of HAP emissions shall comply with the requirements Table 2(d) to this subpart, as the following: (40 CFR 63.6603(a))
 - 1) The owner or operator shall change the oil and filter every 500 hours of operation or annually, whichever comes first. The owner or operator has the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart. (40 CFR 63, Subpart ZZZZ, Table 2d.(4)(a))
 - 2) The owner or operator shall inspect the air cleaners every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. (40 CFR 63. Subpart ZZZZ, Table 2d.(4)(b))
 - 3) The owner or operator shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. (40 CFR 63. Subpart ZZZZ, Table 2d.(4)(c))
- iii. General requirements for complying with 40 CFR 63, Subpart ZZZZ:
 - 1) The owner or operator shall be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to the RICE at all times. (40 CFR 63.6605(a))
 - 2) At all times the owner or operator shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator

¹⁵ This operation is subject to 40 CFR 63 Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, because it involves a stationary reciprocating internal combustion engine (RICE) located at an area source of HAP emissions.

which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.6605(b))

- iv. The owner or operator shall demonstrate continuous compliance with each emission limitation, operating limitation, and other applicable requirements in Tables 2d to this subpart. (40 CFR 63.6640(a))
- v. The owner or operator shall report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in § 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE. (40 CFR 63.6640(b))
- vi. The owner or operator shall operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) below, is prohibited. If the owner or operator does not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. (40 CFR 63.6640(f))
 - 1) There is no time limit on the use of the emergency stationary RICE in emergency situations. (40 CFR 63.6640(f)(1))
 - 2) The owner or operator may operate the emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2). (40 CFR 63.6640(f)(2))
 - (a) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local

government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. (40 CFR 63.6640(f)(2)(i))

vii. For additional HAP standards see Emission Unit Plant-wide.

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 these records readily available to the District upon request.

a. **HAP** (40 CFR Part 60 Subpart ZZZZ)

i. Monitoring, installation, collection, operation, and maintenance requirements: (40 CFR 63.6625)

- 1) The owner or operator shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 63.6625(e))
- 2) The owner or operator shall install a non-resettable hour meter if one is not already installed. (40 CFR 63.6625(f))
- 3) The owner or operator shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup. (40 CFR 63.6625(h))
- 4) The owner or operator has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is

less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. (40 CFR 63.6625(i))

- ii. Recordkeeping requirements: (40 CFR 63.6655)
 - 1) The owner or operator shall keep the following records that apply to your RICE: (40 CFR 63.6655(a))
 - (a) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv). (40 CFR 63.6655(a)(1))
 - (b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (40 CFR 63.6655(a)(2))
 - (c) Records of all required maintenance performed on the air pollution control and monitoring equipment. (40 CFR 63.6655(a)(4))
 - (d) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 63.6655(a)(5))
 - 2) The owner or operator shall keep the records required in Table 6 of this subpart to show continuous compliance with each emission or

operating limitation that applies to the RICE, as the following: (40 CFR 63.6655(d))

- (a) Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or (Table 6, section 9)
 - (b) Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (Table 6, section 9)
- 3) The owner or operator shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan. (40 CFR 63.6655(e))
 - 4) The owner or operator shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR 63.6640(f)(2)(ii) or (iii) or 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. (40 CFR 63.6655(f))
- iii. For additional monitoring and record keeping requirements see Emission Unit Plant-wide.

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

- a. **HAP** (40 CFR Part 60 Subpart ZZZZ)
 - i. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the

emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. (40 CFR 63, Subpart ZZZZ, Footnote 2 of Table 2d)

- ii. For additional HAP reporting requirements see Emission Unit Plant-wide.

Fee Comment

On May 15, 2013, the Board approved revisions to Regulation 2.08, which implemented a new fee structure. As a result, U.S. Army Corp of Engineers will be required to pay annual fees.

Attachment A - 40 CFR Part 63, Subpart ZZZZ
National Emission Standards for Hazardous Air Pollutants for Area Source Categories
(Compression Ignition Engines \leq 300 HP)

The owner or operator shall comply with the following requirements unless there are more current promulgated regulations. When the diesel engines are onsite in one place for at least 12 consecutive months then Regulation 40 CFR 63 Subpart ZZZZ does apply to the engines..

Specific Conditions

S1. Standards (40 CFR Part 63, Subpart ZZZZ)

a. **HAP** (Regulation 2.17, section 5.1)

i. If you own or operate existing stationary RICE located at an area source of HAP emissions, you must comply with the following requirements: (40 CFR Part 63, Section 63.6603 (a)) and (40 CFR Part 63, Subpart ZZZZ, Table 2d)

- 1) Change oil and filter every 1,000 hours of operation or annually, whichever comes first; and (Table 2d, 1, a)
- 2) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; (Table 2d, 1, b)
- 3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. (Table 2d, 1, b)
- 4) During periods of startup you must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. (Table 2d, 1)

ii. Fuel Requirements:

There are no fuel requirements for engines this size at this facility.

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. **HAP**

- i. If you own or operate existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions, you must:
 - 1) Operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR Part 63, Subpart ZZZZ, Section 63.6625 (e))
 - 2) Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. (40 CFR Part 63, Subpart ZZZZ, Section 63.6625(h))
- ii. This facility does have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in S1.a.i.1). (40 CFR Part 63, Subpart ZZZZ, Section 63.6625(i))
 - 1) The oil analysis must be performed at the same frequency specified for changing the oil.
 - 2) The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content.
 - 3) The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis;
 - 4) If the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later.
 - 5) The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

- iii. You must be in compliance with the emission limitations and operating limitations that apply to you at all times. (40 CFR Part 63, Subpart ZZZZ, Section 63.6605)
 - 1) At all times you must operate and maintain any affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator (District) which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- iv. You must demonstrate continuous compliance with each emission limitation and operating limitation in S1.a.i. (40 CFR Part 63, Subpart ZZZZ, Section 63.6640)
 - 1) You must report each instance in which you did not meet each emission limitation or operating limitation. These instances are deviations from the emission and operating limitations in this subpart.
- v. To demonstrate compliance with emission and operating limitations, you must keep the following records: (40 CFR Part 63, Subpart ZZZZ, Section 63.6655(a))
 - 1) A copy of each report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted. (40 CFR Part 63, Subpart ZZZZ, Section 63.6655(a-1))
 - 2) Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions (40 CFR Part 63, Subpart ZZZZ, Section 63.6640, Table 6, Item 9)
 - 3) Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR Part 63, Subpart ZZZZ, Section 63.6640, Table 6, Item 9)
- vi. You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to

your own maintenance plan. (40 CFR Part 63, Subpart ZZZZ, Section 63.6655 (e))

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

There are no reporting requirements for this equipment.

Attachment B - Protocol Checklist for a Performance Test

A completed protocol should include the following information:

- 1. Facility name, location, and ID #;
- 2. Responsible Official and environmental contact names;
- 3. Permit numbers that are requiring the test to be conducted;
- 4. Test methods to be used (i.e. EPA Method 1, 2, 3, 4, and 5);
- 5. Alternative test methods or description of modifications to the test methods to be used;
- 6. Purpose of the test including equipment and pollutant to be tested; the purpose may be described in the permit that requires the test to be conducted or may be to show compliance with a federal regulation or emission standard;
- 7. Tentative test dates (These may change but the District will need final notice at least 10 days in advance of the actual test dates in order to arrange for observation.);
- 8. Maximum rated production capacity of the system;
- 9. Production-rate goal planned during the performance test for demonstration of compliance (if appropriate, based on limits);
- 10. Method to be used for determining rate of production during the performance test;
- 11. Method to be used for determining rate of production during subsequent operations of the process equipment to demonstrate compliance;
- 12. Description of normal operation cycles;
- 13. Discussion of operating conditions that tend to cause worse case emissions; it is especially important to clarify this if worst case emissions do not come from the maximum production rate;
- 14. Process flow diagram;
- 15. The type and manufacturer of the control equipment, if any;
- 16. The control equipment (baghouse, scrubber, condenser, etc.) parameter to be monitored and recorded during the performance test. Note that this data will be used to ensure representative operation during subsequent operations. These parameters can include pressure drops, flow rates, pH, and temperature. The values achieved during the test may be required during subsequent operations to describe what pressure drops, etcetera, are indicative of good operating performance; and
- 17. How quality assurance and accuracy of the data will be maintained, including;
 - Sample identification and chain-of-custody procedures
 - If audit samples are required for this test method, audit sample provider and number of audit samples to be used
- 18. Pipe, duct, stack, or flue diameter to be tested;
- 19. Distances from the testing sample ports to the nearest upstream and downstream flow disturbances such as bends, valves, constrictions, expansions, and exit points for outlet and additionally for inlet;
- 20. Determine number of traverse points to be tested for outlet and additionally for inlet if required using Appendix A-1 to 40 CFR Part 60;
 - Method 1 if stack diameter is >12"
 - Method 1a if stack diameter is greater than or equal to 4" and less than 12"
 - Alternate method of determination for <4"
 - If a sample location at least two stack or duct diameters downstream and half a diameter upstream from any flow disturbance is not available then an alternative procedure is available for determining the acceptability of a measurement location. This procedure described in Method 1, Section 11.5 allows for the determination of gas flow angles at the sampling points and comparison of the measured results with acceptability criteria.
- 21. The Stack Test Review fee shall be submitted with each stack test protocol.