



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



**Federally Enforceable District Origin Operating Permit
Statement of Basis
23 February 2016**

Owner: TENARIS USA
Source: Republic Conduit Manufacturing

Plant Location: 7301 Logistics Dr., Louisville, Kentucky 40258

Date Application Received: 12/28/2007; 8/7/2008; 10/29/2009; 10/7/2010; 11/4/2011; 2/01/2012

Date of Draft Permit: 23 February 2016

District Engineer: Yiqiu Lin **Permit No:** O-1553-16-F

Plant ID: 1553 **SIC Code:** 3317 **NAICS:** 331210

Introduction:

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

Jefferson County is classified as an attainment area for lead (Pb), nitrogen dioxide (NO₂), carbon monoxide (CO), 1 hr and 8 hr ozone (O₃), and particulate matter less than 10 microns (PM₁₀); and is a non-attainment area for the 1997 standard for particulate matter less than 2.5 microns (PM_{2.5}), unclassifiable for the 2012 standard for particulate matter less than 2.5 microns (PM_{2.5}) and partial non-attainment area for sulfur dioxide (SO₂).

Application Type/Permit Activity:

Initial Issuance

Permit Revision

Administrative

Minor

Significant

Permit Renewal

Compliance Summary:

Compliance certification signed

Source is out of compliance

Compliance schedule included

Source is operating in compliance

I. Source Information

1. **Product Description:** Republic Conduit Manufactures steel pipes and tubes from purchased steel coils.
2. **Process Description:** At Republic Conduit Manufacturing plant, steel coils are fed into weld mills to make pipes or tubes. The steel pipes and tubes are galvanized in LEMT electro galvanizing line or hot dip galvanizing line. The steel pipes and tubes may be threaded or painted as needed at the plant.
3. **Site Determination:** There are no other facilities that are contiguous or adjacent to this facility
4. **Emission Unit Summary:**

Emission Unit	Equipment Description
U1	Weld mills, including three (3) 18 ton/hr weld mills and one (1) cooling tower.
U2	LEMT electro galvanizing line
U3	Hot dip galvanizing line
U4	Thread line
U5	Natural gas-fired boilers and heaters
U6	Paint coating operations
IA-1	Emergency Generator
IA-2	Storage Tanks and Totes

5. **Fugitive Sources:** The fugitive sources identified by the source are various paint coating operations.
6. **Permit Revisions:**

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
Initial	O-1553-16-F	x/xx/2016	2/23/2016	Initial	Entire Permit	Initial Permit Issuance

7. Construction Permit History:

Permit No.	Issue Date	Description
13-05-C	3/31/2006	LEMT electro galvanizing line
14-05-C	3/31/2006	One (1) wet scrubber #2 (9G)
15-05-C	3/31/2006	One (1) LEMT inch mark printer (E9I)
18-05-C	3/31/2006	Hot dip galvanizing line
19-05-C	3/31/2006	One (1) wet scrubber #3 (11B)
22-05-C	3/31/2006	Rigid finishing line (E13AB1 - E13C5)
25-05-C	3/31/2006	Zinc dissolution process
26-05-C	3/31/2006	Waste water treatment plant
27-05-C	3/31/2006	Parts washers
474-07-C	8/31/2008	Three (3) existing weld mills
475-07-C	8/31/2008	One (1) baghouse, make Farr APC, model GS20.
443-08-C	6/30/2008	535 BHP (399 kW-hr) emergency generator
526-08-C	9/10/2008	Mist eliminator from the passivation process
587-08-C	10/31/2008	Three (3) storage tanks
588-08-C	10/13/2008	Aerosol touch up coating operation
589-08-C	10/31/2008	Weld flaw ink mark coating
692-08-C	11/30/2008	small diameter thread line surface coating
693-08-C	11/30/2008	Coating for large diameter thread line
20-05-C(R2)	12/8/2009	Hot dip galvanizing line
21-05-C(R1)	10/31/2009	Baghouse for hot dip galvanizing
24-05-C(R1)	7/31/2009	Combustion sources
28-05-C(R2)	3/31/2009	Storage tanks
93-08-C	1/31/2009	Gimeco hydrochloric acid recovery unit
32-09-C	3/31/2009	One (1) 12,750 gallon paint tank, T-2.
33-09-C	1/31/2009	Two (2) ultra violet ink printers
34-09-C	1/31/2009	Three (3) storage tanks
130-09-C	6/30/2009	Metaullics zinc recovery (MZR) system
20-10-C	2/5/2010	cold solvent parts washer
54-10-C	4/13/2010	Two (2) cold solvent parts washers
35226-12-C	5/30/2012	change to water based paint
The following construction permits have been voided:		
07-05-C	3/31/2006	Six (1) weld mills (<i>Replaced by permit 474-07-C</i>)

Permit No.	Issue Date	Description
08-05-C	3/31/2006	SEMT line (<i>Never installed</i>)
09-05-C	3/31/2006	SEMT line scrubber (<i>Never installed</i>)
10-05-C	3/31/2006	SEMT line inch mark printer (<i>Never installed</i>)
11-05-C	3/31/2006	SEMT line ID painting (<i>Never installed</i>)
12-05-C	3/31/2006	SEMT line thermal oxidizer (<i>Never installed</i>)
23-05-C	3/31/2009	Three (3) baghouses (13A4, 13B3, and 13C3) controlling rigid finishing line (<i>This equipment has been removed</i>)
442-08-C	6/30/2008	One (1) abrasive blast cleaning unit (<i>Plant maintenance equipment. It is a trivial activity</i>)
444-08-C	6/30/2008	Small thread line end coater (<i>Replaced by 586-08-C</i>)
445-08-C	6/30/2008	Weld flaw ink marker (<i>Replaced by 589-08-C</i>)
586-08-C	10/31/2008	Threaded end coating (<i>Replaced by 692-08-C</i>)
F-13-1003-C	10/2/2013	Miscellaneous metal parts surface coating (<i>Never installed</i>)

8. Emission Summary:

Pollutant	District Calculated Actual Emissions (tn/yr) 2008 Data	Pollutant that triggered Major Source Status (based on PTE)
CO	7.65	No
NO _x	9.11	No
SO ₂	0.05	No
PM ₁₀	41.85	No
VOC	12.24	Yes
Total HAPs	1.60	No
Single HAP	0.24	Yes

9. Applicable Requirements:

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

10. Referenced MACT Federal Regulations: 40 CFR 63, Subpart WWWW

11. Referenced non-MACT Federal Regulations: There are no non-MACT federal regulations for this source.

II. Regulatory Analysis

1. **Acid Rain Requirements:** Republic Conduit Manufacturing is not subject to the Acid Rain Program.
2. **Stratospheric Ozone Protection Requirements:** Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. Republic Conduit Manufacturing does not manufacture, sell, or distribute any of the listed chemicals. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.
3. **Prevention of Accidental Releases 112(r):** Republic Conduit Manufacturing does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, *Chemical Accident Prevention Provisions*, in a quantity in excess of the corresponding specified threshold amount.
4. **40 CFR Part 64 Applicability Determination:** Republic Conduit Manufacturing is not subject to 40 CFR Part 64 - *Compliance Assurance Monitoring for Major Stationary Sources*.
5. **Basis of Regulation Applicability**

- a. **Plant-wide**

Republic Conduit Manufacturing is a potential major source for the pollutant VOC and Single HAP (HCl). Regulation 2.17 – *Federally Enforceable District Origin Operating Permits* establishes requirements to limit the plant wide potential emission rates to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements. The source requested limits of the criteria pollutant VOC < 100 ton/yr and Single HAP < 10 ton/yr to be a FEDOOP. The source is not major for Greenhouse Gases.

Regulations 5.00 5.20, 5.21, and 5.23 (STAR Program) establishes requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards. Republic Conduit submitted the TAC Environmental Acceptability Demonstration to the District in September 2008, March 2009, and July 2009. Tier 4 AERMOD air dispersion modeling was performed for each emission unit that has non-de minimis TAC emissions. Compliance with the STAR EA Goals was demonstrated in the revised EA Demonstration submitted in July, 2009. The following table demonstrates

that the carcinogen risk and non-carcinogen risk values comply with the STAR EA goals required in Regulation 5.21.

Plant-wide Sum	All new P/PE		All new P/PE	
Industrial Total R _C	5.59	< 75	2.93	< 38
Non-Ind. Total R _C	2.56	< 7.5	0.90	< 3.8
Industrial Total R _{NC} (max)	0.21	< 3.0		
Non-Ind. Total R _{NC} (max)	0.20	< 1.0		

		R _{NC} Total			Weld Mills				LEMT Line				Hot Dip Galv. Line				E Generator			
		Indus.	Non-Ind.	R _{NC}	Industrial		Non-Ind.		Industrial		Non-Ind.		Industrial		Non-Ind.		Industrial		Non-Ind.	
TAC	CAS #	R _{NC}	R _{NC}	EA	R _C	R _{NC}	R _C	R _{NC}	R _C	R _{NC}	R _C	R _{NC}	R _C	R _{NC}						
Plant-wide Total Risk		0.21	0.20	0	0.54	0.54	1.56	0.49	0.55	0.63	2.93	0.90								
Nitric acid	7697-37-2	0.04	0.04	<3.0/1.0	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sulfuric acid	7664-939-9	0.21	0.20	<3.0/1.0	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydrochloric acid	7647-01-0	0.01	0.01	<3.0/1.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
Xylene	1330-20-7	0.03	0.03	<3.0/1.0	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethyl Benzene	100-41-4	0.00	0.00	<3.0/1.0	0.00	0.00	0.00	0.00	0.16	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chromium +6	7440-47-3	0.02	0.01	<3.0/1.0	0.00	0.00	0.00	0.00	1.40	0.02	0.34	0.00	0.55	0.01	0.63	0.01	0.00	0.00	0.00	0.00
Chromium +3	16065-83-1	0.00	0.00	<3.0/1.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lead		0.00	0.00	<3.0/1.0	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cadmium	7440-43-9	0.01	0.01	<3.0/1.0	0.52	0.01	0.52	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aluminum Oxide	7429-90-5	0.01	0.01	<3.0/1.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
DPM		0.03	0.00	<3.0/1.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.93	0.03	0.90	0.00

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

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

b. **Emission Unit U1 – Weld Mills**

i. **Equipment:**

ID	P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
E3	One (1) weld mill,	18 ton/hr	2006	5.00, 5.01,	Regulation 5.00, 5.01, 5.20, 5.21,

ID	P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
	make Thermatool, model CF14-5006460			5.20, 5.21, 5.22, 5.23 7.08, 7.25	5.22, 5.23 establishes the requirements for Environmental Acceptability for TACs. The source is a Group I company with Category 1TACs which potentially could exceed the de minimis values. Regulation 7.08 establishes the requirements for PM emissions from new processes that commence construction after September 1, 1976.
E4	One (1) weld mill, make Thermatool, model CF14-5006460	18 ton/hr	2006		
E5	One (1) weld mill, make East Coast Induction, model VT-300	18 ton/hr	2006		
E100	One (1) cooling tower, make Marley, model NC-8310F2	30,000 gal/day	2006	7.08	New VOC emission facilities for which construction or modification is commenced after June 13, 1979 are subject to Regulation 7.25.

ii. **Standards/Operating Limits**

1) **PM**

The emission standard for PM is determined in accordance with Regulation 7.08, section 3.1.2 and based on capacity of the equipment.

2) **Opacity**

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

3) **VOC**

This unit is subject to Regulation 7.25 because of VOC emissions from weld mill coolant. On January 6, 2014, Republic Conduit submitted a BACT analysis based on a PTE of 6.44 tpy VOC in accordance with the application. The District approves the BACT Analysis through issuance of this FEDOOP permit.

4) **TAC**

(a) Regulation 5.21, section 2.2 establishes Environmental Acceptability Goals for TACs and Regulation 5.20 provides methodology for

determining benchmark ambient concentration of TAC. In accordance with Regulation 5.20 and 5.21, the source shall not allow any TAC emissions to exceed environmentally acceptable levels.

- (b) TAC emissions from insignificant activities of this unit are de minimis per Regulation 5.21, section 2.3.

c. **Emission Unit U2 – LEMT Electro Galvanizing Line**

i. **Equipment:**

ID	P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
E7	Descale #1 heater and tank	30 ton/hr	2006	5.00, 5.01, 5.20, 5.21, 5.22, 5.23 40CFR63 Subpart WWWW	Regulation 5.00, 5.01, 5.20, 5.21, 5.22, 5.23 establishes the requirements for Environmental Acceptability for TACs. The source is a Group I company with Category 1TACs which potentially could exceed the de minimis values. Regulation 7.08 establishes the requirements for PM emissions from new processes that commence construction after September 1, 1976. New VOC emission facilities for which construction or modification is commenced after June 13, 1979 are subject to Regulation 7.25. 40 CFR 63, Subpart WWWW establishes HAP area source standards for plating and polishing operations.
E8	Descale #2 heater and tank	30 ton/hr	2006		
E9	Descale #3 heater and tank	30 ton/hr	2006		
E10	Electroclean #1 heater and tank	30 ton/hr	2006		
E11	Electroclean #2 heater and tank	30 ton/hr	2006		
E12a	One (1) drying oven		2006		
E12b	One (1) tube cooling		2006		
E18	One (1) zinc dissolver (T-32)	5,300 gallon	2006		
E21	Rinse, pickle, plating, and post plating bath tanks	30 ton/hr	2006		
E24	One (1) Sodium sulfate hopper		2006		
E30a	One (1) LEMT Inch mark printer		2006	5.00, 5.01, 5.20, 5.21, 5.22, 5.23 7.25	
E30b	Two (2) LEMT UV ink printers		2009		

ii. **Standards/Operating Limits**

1) **PM**

The emission standard for PM is determined in accordance with Regulation 7.08, section 3.1.2 and based on capacity of the equipment.

2) **Opacity**

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

3) **VOC**

(a) Regulation 7.25 establishes standards for VOC emission units LEMT Ink Mark Printer (U2-E22b) and LEMT UV Printers (U2-E22c).

(b) It has been demonstrated that the total potential VOC emissions from LEMT Ink Mark Printer (U2-E22b) and LEMT UV Printers (U2-E22c) cannot exceed 5 tpy uncontrolled. Therefore they are in compliance with Regulation 7.25 and a BACT analysis is not required.

4) **HAP**

40 CFR 63, Subpart WWWWWW establishes emission limitations, work practice standards, and operating limits for this unit.

5) **TAC**

(a) Regulation 5.21, section 2.2 establishes Environmental Acceptability Goals for TACs and Regulation 5.20 provides methodology for determining benchmark ambient concentration of TAC. In accordance with Regulation 5.20 and 5.21, the source shall not allow any TAC emissions to exceed environmentally acceptable levels.

(b) The LEMT galvanizing line has sulfuric acid emission standards since its EA Demonstration was based on controlled PTE. AERMOD modeling results and controlled PTE for sulfuric acid were used to demonstrate compliance with EA Goals.

(c) It has been demonstrated that the uncontrolled sulfuric acid emissions from the LEMT line cannot meet the EA goals specified in Regulation 5.21. Therefore, the owner or operator is required to

operate the wet scrubber to meet the TAC standards.

iii. **Monitoring, Recordkeeping, and Reporting**

1) **HAP**

40 CFR 63, Subpart WWWWWW establishes monitoring, recording keeping, and reporting requirements for this unit.

d. **Emission Unit U3 – Hot Dip Galvanizing Line**

i. **Equipment:**

ID	P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
E23	Cleaning and pickling tanks and one (1) HCl acid recovery unit	43.8 ton/hr	2006	5.00, 5.01, 5.20, 5.21, 5.22, 5.23 7.08	Regulation 5.00, 5.01, 5.20, 5.21, 5.22, 5.23 establishes the requirements for Environmental Acceptability for TACs. The source is a Group I company with Category 1TACs which potentially could exceed the de minimis values. Regulation 7.08 establishes the requirements for PM emissions from new processes that commence construction after September 1, 1976. 40 CFR 63, Subpart WWWWWW establishes HAP area source standards for plating and polishing operations.
E25	One (1) preheat, one (1) zinc kettle, one (1) hot dip blow out, and two (2) process cyclones	43.8 ton/hr	2006		
E28	One (1) water quench, one (1) passivation spray, and one (1) water rinse tank	43.8 ton/hr	2006		
E29	Drying oven	43.8 ton/hr	2006		

ii. **Standards/Operating Limits**

1) **PM**

- (a) The emission standard for PM is determined in accordance with Regulation 7.08, section 3.1.2 and based on capacity of the equipment.
- (b) It has been demonstrated that the PM emissions from the hot dip galvanizing line E25 can exceed the lb/hr PM emission standard uncontrolled, but cannot exceed the PM standard controlled. Therefore, the

source is required to operate baghouse (C25) at all times in order to comply with the lb/hr PM emission standard.

- (c) In an email dated 12/7/2009, Republic Conduit requested an 87,516 lbs/hr throughput limit to meet the throughput requirements for the stack test. If Republic Conduit requests to increase the production limit, the stack test needs to be redone at more than 90% of the new limit per Regulation 1.04, section 2.1.

2) **Opacity**

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

3) **HAP**

40 CFR 63, Subpart WWWW establishes emission limitations, work practice standards, and operating limits for this unit.

4) **TAC**

- (a) Regulation 5.21, section 2.2 establishes Environmental Acceptability Goals for TACs and Regulation 5.20 provides methodology for determining benchmark ambient concentration of TAC. In accordance with Regulation 5.20 and 5.21, the source shall not allow any TAC emissions to exceed environmentally acceptable levels.
- (b) This unit has TAC emission standards since its EA Demonstration was based on controlled PTE. If the controlled PTE for the TAC is less than de minimis level, use De Minimis as limit. If the controlled PTE for the TAC is greater than de minimis level, modeling results were used to calculate risk value to compare to the EA Goals and controlled PTE is used as limit.
- (c) It has been demonstrated that the uncontrolled potential TAC emissions from the hot dip galvanizing line cannot meet the EA goals specified

in Regulation 5.21. Therefore, the owner or operator is required to operate the wet scrubber and mist eliminator to meet the TAC standards.

iii. **Monitoring, Recordkeeping, and Reporting**

1) **HAP**

40 CFR 63, Subpart WWWWWW establishes monitoring, recording keeping, and reporting requirements for this unit.

e. **Emission Unit U4 – Thread Line**

i. **Equipment:**

ID	P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
E13-AB1	Saw	30 ton/hr	2006	5.00, 5.01, 5.20, 5.21, 5.22, 5.23 7.08, 7.25	Regulation 5.00, 5.01, 5.20, 5.21, 5.22, 5.23 establishes the requirements for Environmental Acceptability for TACs. The source is a Group I company with Category 1TACs which potentially could exceed the de minimis values.
E13-A2	Facing	15 ton/hr	2006		
E13-A3	Threading	15 ton/hr	2006		
E13-A5	Cap/Coupling	15 ton/hr	2006		
E13-A6	Bundling	15 ton/hr	2006		
E13-B1	Facing	15 ton/hr	2006		
E13-B2	Threading	15 ton/hr	2006		Regulation 7.08 establishes the requirements for PM emissions from new processes that commence construction after September 1, 1976.
E13-B4	Cap/Coupling	15 ton/hr	2006		
E13-B5	Bundling	15 ton/hr	2006		
E13-C1	Facing	15 ton/hr	2006		New VOC emission facilities for which construction or modification is commenced after June 13, 1979 are subject to Regulation 7.25.
E13-C2	Threading	15 ton/hr	2006		
E13-C4	Cap/Coupling	15 ton/hr	2006		
E13-C5	Bundling	15 ton/hr	2006		

ii. **Standards/Operating Limits**

1) **PM**

The emission standard for PM is determined in accordance with Regulation 7.08, section 3.1.2 and based on capacity of the equipment.

2) **Opacity**

Regulation 7.08, section 3.1.1 establishes an opacity

standard of less than 20%, for processes that commenced construction after September 1, 1976.

3) **VOC**

This unit is subject to Regulation 7.25 because of VOC emissions from thread lines coolant. On January 6, 2014, Republic Conduit submitted a BACT analysis based on a PTE of 1.03 tpy VOC in accordance with the application. The District approves the BACT Analysis through issuance of this FEDOOP permit.

4) **TAC**

(a) Regulation 5.21, section 2.2 establishes Environmental Acceptability Goals for TACs and Regulation 5.20 provides methodology for determining benchmark ambient concentration of TAC. In accordance with Regulation 5.20 and 5.21, the source shall not allow any TAC emissions to exceed environmentally acceptable levels.

(b) TAC emissions from insignificant activities of this unit are de minimis per Regulation 5.21, section 2.3.

f. **Emission Unit U5 – Natural gas-fired boilers and heaters**

i. **Equipment:**

ID	P/PE	Install Date	Applicable Regulation	Basis for Applicability
E14-A	Natural gas-fired boilers, including (2) 9.5 MMBTU/hr boilers, (1) 8.0 MMBTU/hr boiler	Various	5.00, 5.01, 5.20, 5.21, 5.22, 5.23 7.06	Regulation 5.00, 5.01, 5.20, 5.21, 5.22, 5.23 establishes the requirements for Environmental Acceptability for TACs. The source is a Group I company with Category 1TACs which potentially could exceed the de minimis values.
E14-B	Natural gas-fired process heaters or ovens, including (1) 1.21 MMBTU/hr hot dip superheater, (1) 16.8 MMBTU/hr hot dip preheater, (1) 2.5 MMBTU/hr zinc kettle heater; (6) building heaters 9.3 MMBTU/hr total; (3) building intake heaters 10.584 MMBtu total; (5) 2 MMBtu E-galv. process heaters; (1) 1.4 MMBTU	Various	5.00, 5.01, 5.20, 5.21, 5.22, 5.23 7.08	New indirect heat exchangers for which having a capacity less than 250 MMBtu/hr and commenced after September 1, 1972, are subject to Regulation 7.06. Regulation 7.08 establishes the requirements for PM emissions from new processes that commence construction after

ID	P/PE	Install Date	Applicable Regulation	Basis for Applicability
	hot dip drying oven; (1) 0.1 MMBtu zinc recovery heater; (2) 0.015 MMBtu small dia. end heaters; (1) 3.2 MMBtu thermal oxidizer			September 1, 1976.

ii. **Standards/Operating Limits**

1) **PM**

- (a) The PM emission standard for boilers is determined in accordance with Regulation 7.06, section 4.1.4 and based on capacity of the equipment.
- (b) The PM emission standard for process heaters and ovens is determined in accordance with Regulation 7.08, section 3.1.2 and based on capacity of the equipment.
- (c) The District has performed a one-time PM, NO_x and SO₂ compliance demonstration for the boilers, process heaters and oven using AP-42 emission factors and combusting natural gas and propane, the regulatory emission standards cannot be exceeded. Therefore, there are no monitoring, record keeping, and reporting requirements for these boilers, process heaters and oven with respect to NO_x and SO₂ emission limits.

2) **Opacity**

Regulation 7.08, section 3.1.1 and 7.06, section 4.2 establishes an opacity standard of less than 20%, for the affected facility.

3) **SO₂**

The SO₂ emission standard for boilers is determined in accordance with Regulation 7.06, section 5.1.1 and based on capacity of the equipment.

4) **NO_x**

Regulation 7.08, section 4 establishes NO_x emission

standard for process heaters and ovens.

5) **TAC**

(a) Regulation 5.21, section 2.2 establishes Environmental Acceptability Goals for TACs and Regulation 5.20 provides methodology for determining benchmark ambient concentration of TAC. In accordance with Regulation 5.20 and 5.21, the source shall not allow any TAC emissions to exceed environmentally acceptable levels.

(b) TAC emissions from natural gas or propane combustion are de minimis per Regulation 5.21, section 2.7.

g. **Emission Unit U6 – Paint coating operations**

i. **Equipment:**

ID	P/PE	Install Date	Applicable Regulation	Basis for Applicability
E6	One (1) weld flaw paint marking system for weld mills (U1)		5.00, 5.01, 5.20, 5.21, 5.22, 5.23 7.08, 7.59	Regulation 5.00, 5.01, 5.20, 5.21, 5.22, 5.23 establishes the requirements for Environmental Acceptability for TACs. The source is a Group I company with Category 1TACs which potentially could exceed the de minimis values.
E22	One (1) ID painting with drying oven for LEMT galvanizing line (U2)			
E13-A7	Threaded ends coating for thread line (U4)			
E13-B6	Threaded ends coating for thread line (U4)			Regulation 7.08 establishes the requirements for PM emissions from new processes that commence construction after September 1, 1976.
E13-C6	Threaded ends coating for thread line (U4)			Regulation 7.59 establishes the requirements for VOC emissions from new paint spray booths for metal parts commenced after May 20, 1981.
E102	Aerosol touch up coating operation			

ii. **Standards/Operating Limits**

1) **VOC**

Regulation 7.59, section 3.1 defines the VOC content limits for the coatings used for miscellaneous metal parts and

products surface coating operation.

2) **Opacity**

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

3) **PM**

(a) In accordance with Regulation 7.08, section 3.1.2, Table 1, since the process rate for this equipment is less than 0.5 ton/hr, the emission standard for PM is 2.34 lb/hr.

(b) It has been demonstrated that the PM emissions from each of the paint coating operations cannot exceed the lb/hr PM emission standard uncontrolled. Therefore, there are no monitoring, record keeping, and reporting requirements with respect to PM lb/hr emission standard.

4) **HAP**

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 target HAPs in the spray coatings and paint stripping compounds.

5) **TAC**

(a) Regulation 5.21, section 2.2 establishes Environmental Acceptability Goals for TACs and Regulation 5.20 provides methodology for determining benchmark ambient concentration of TAC. In accordance with Regulation 5.20 and 5.21, the source shall not allow any TAC emissions to exceed environmentally acceptable levels.

(b) TAC emissions from this unit are de minimis per PTE evaluation.

iii. **Monitoring and Record Keeping**

1) **VOC**

Regulation 7.59, section 6.1 and 6.2 establishes monitoring

and record keeping requirements for affected facility.

III. Other Requirements

1. **Temporary Sources:** The source did not request to operate any temporary facilities.
2. **Short Term Activities:** The source did not report any short term activities.
3. **Emissions Trading:** N/A
4. **Operational Flexibility:** The source did not request any operation flexibility.
5. **Compliance History:**

Incid. #	Date	Regulation Violated	Settlement
04575	4/15/2007	Reg. 1.06, section 4 and 5	Agreement with fine

6. Calculation Methodology or Other Approved Method:

For weld mills (U1), LEMT electro galvanizing line (U2), hot dip galvanizing line (U3), and thread line (U4), emission factors are shown in the following table. If emission factors were determined by stack test results, the owner or operator shall retest the emission unit within ten (10) years since the most recent District accepted stack test, according to Attachment C – General Testing Requirements.

Unit ID	Emission Point Description	Pollutants	Emission Factors Unit	Uncontrolled Emission Factors	Controlled Emission Factors	Emission Factor Sources	Projected Retest Date Prior to...
U1	Weld mills	PM/PM ₁₀	lb/ton	0.0036	0.0018	Stack test, July 2008	July 2018
		VOC	lb/ton	0.0446		Company's analysis	
U2	LEMT line	PM/PM ₁₀	lb/ton	0.042	0.007	Stack test, April 2010	April 2020
		Chromium (Cr) VI	lb/ton	1.4E-06	1.4E-06	Stack test, April 2012	April 2022
		Chromium (Cr) III	lb/ton	1.7E-06	1.6E-06		
		Sulfuric Acid	lb/ton	1.6E-02	1.2E-03		
		Nitric Acid	lb/ton	2.0E-04	3.7E-03		
U3	Hot dip line-Pickling	PM/PM ₁₀	lb/ton	0.005	0.005	Stack test, April 2010	April 2020
	Hot dip line-Galvanizing	PM/PM ₁₀	lb/ton	0.308	0.005		

	Hot dip line	Hydrochloric Acid	lb/ton	0.082	0.003	Stack test, April 2010	April 2020
		Chromium (Cr) VI	lb/ton	4.6E-03	4.6E-04	Stack test, July 2008	July 2018
		Chromium (Cr) III	lb/ton	1.0E-03	1.0E-04		
		Cadmium (Cd)	lb/ton	6.3E-07	2.0E-08	MSDS	
		Lead (Pb)	lb/ton	1.6E-06	5.2E-08		
U4	Thread line	VOC	lb/ton	0.021		Company's analysis	

For natural gas-fired boilers (U5), emission factors from AP-42, 1.4, Natural Gas Combustion, shall be used for emission calculations.

For paint coating operations (U6), emissions shall be calculated using mass balance method and based on pollutant contents in material safety data sheet (MSDS).

For internal combustion engine, emission factors from AP-42, 3.3, Gasoline and Diesel Industrial Engines, shall be used for emission calculations.

7. Insignificant Activities

Equipment	Quantity	PTE (tpy)	Basis for Exemption
Lime silo with baghouse used for water treatment plant	1	1.34 PM ₁₀	Regulation section 1.02, 1.02, section 1.38
Cold solvent parts washers, each equipped with a secondary reservoir	9	0.01 VOC	Regulation Appendix A 1.02,
Emergency generator, 535 HP (See unit IA1)	1	4.15 NO _x	Regulation section 1.02, section 1.38
Storage tanks (See unit IA2)	30	0.58 VOC	Regulation Appendix A 1.02,
Temporary storage totes (See unit IA2)	< 172	0.03 VOC	Regulation Appendix A 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.
- 7) The lime silo is subject to Regulation 7.08 and subject to 2.34 lb/hr PM standard and 20% opacity standard. It has been demonstrated that the lime silo cannot exceed the PM and opacity uncontrolled. Therefore, there are no monitoring, record keeping, and reporting requirement for this equipment.
- 8) The parts washers are subject to Regulation 6.18 and shall comply with all the requirements in this regulation.

8. Basis of Regulation Applicability for IA units

a. **Emission Unit IA1 – Emergency generators**

i. **Equipment**

Emission Point	Description	Applicable Regulation	Basis for Applicability
IA1-E50	One (1) 535 HP (399 kW) emergency generator, make Cummins, model DFCC-5740131, engine model NTA855-03. Model year 2005 (Tier 2)	5.00, 5.01, 5.20, 5.21, 5.22, 5.23 40 CFR 63, Subpart ZZZZ	Regulation 5.00, 5.01, 5.20, 5.21, 5.22, 5.23 establishes the requirements for Environmental Acceptability for TACs. The source is a Group I company with Category 1TACs which potentially could exceed the de minimis values. 40CFR63 Subpart ZZZZ establishes national emission limitations and operating limitations for HAP emitted from stationary RICE located at major and area sources of HAP emissions.

i. **Standards/Operating Limits**

1) **HAP**

40 CFR 63.6595, 6603, 6604, 6605, and 6640 establish emission standards and compliance requirements for the owner or operator or manufacturer of the emergency stationary CI ICE.

2) **TAC**

TAC emissions from insignificant activities of this unit are de minimis per Regulation 5.21, section 2.3.

ii. **Monitoring and Record Keeping**

1) **HAP**

40 CFR 63.6625 and 6655 establish monitoring and record keeping requirements for emergency stationary CI ICE.

iii. **Reporting**

1) **HAP**

40 CFR 63, Subpart ZZZZ, Footnote 2 of Table 2d establishes reporting requirements for emergency stationary CI ICE.

b. **Emission Unit IA2 – Storage tanks and totes**

i. **Equipment**

Emission Point	Description	Applicable Regulation	Basis for Applicability
IA1- E100	Storage tanks and temporary storage totes with various contents and capacity. See following equipment list.	5.00, 5.01, 5.20, 5.21, 5.22, 5.23 7.12	Regulation 5.00, 5.01, 5.20, 5.21, 5.22, 5.23 establishes the requirements for Environmental Acceptability for TACs. The source is a Group I company with Category 1TACs which potentially could exceed the de minimis values. Regulation 7.12 establishes the requirements for new storage vessels for VOC compounds that commences construction or modification on or after April 19, 1972.

ii. **Standards/Operating Limits**

1) **VOC**

Regulation 7.12, section 3.3 establishes emission standards for VOC storage vessels.

2) **TAC**

TAC emissions from insignificant activities of this unit are de minimis per Regulation 5.21, section 2.3.