Louisville Metro Air Pollution Control District
701 West Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137

13 Jun 2017

Title V Statement of Basis

Owner/Source: **Industrial Container Services-KY**
405 Industry Rd
Louisville, KY 40208

Application History:	See Table, section I.7.				
Draft Permit:	06 May 2017			Proposed Permit:	06 May 2017
Permitting Engineer:	Rick Williams			Permit Number:	O-0002-17-V
Plant ID:	0002	SIC:	7699	NAICS:	811310

Introduction:
This permit will be issued pursuant to: (1) Regulation 2.16, (2) Title 40 of the Code of Federal Regulations Part 70, and (3) Title V of the Clean Air Act Amendments of 1990. Its purpose is to identify and consolidate existing District and Federal air requirements and to provide methods of determining continued compliance with these requirements.

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

Permit Application Type:

☐	Initial issuance	Permit Revision		☒	Permit renewal
		☐	Administrative		
		☐	Minor		
		☐	Significant		

Compliance Summary

☒	Compliance certification signed	☐	Compliance schedule included
☐	Source is out of compliance	☒	Source is operating in compliance

I. Source Information

1. Product Description:

Recondition used industrial plastic and metal drums.

2. Process Description:

Industrial Container Services – KY, LLC operates a drum reclamation furnace to remove any residual contents in the drums. The drums are then processed through an abrasive blast cleaning unit to remove and paint and rust. The drums are then painted in the surface coating operation. They also clean plastic drums.

3. Site Determination:

There are no other facilities that are contiguous or adjacent to this facility.

Emission Unit Summary:

Emission Unit	Equipment Description
U1	Drum Reclamation Furnace
U2	Metal Parts Surface Coating Operation 1
U3	Metal Parts Surface Coating Operation 2
U4	25.2 MMBtu/hr Natural Gas Fired Boiler
U5	Abrasive Blast Cleaning Units (5 units)
U7	Insignificant Activities with Regulatory Requirements

4. Fugitive Sources:

There are fugitive VOC, HAP, and TAC emissions from the surface coating of steel drums at this source.

5. Permit Revisions:

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
Initial	139-97-TV	24 Jan 2001	23 Apr 2000	Initial	Entire Permit	Initial Permit Issuance
R1	139-97-TV (R1)	2 Aug 2011	01 Apr 2011	Renewal	Entire Permit	5 year renewal: Incorporate Construction Permits 121-03, 348-05, 82-06, 446-08, 447-08, 259-09-C. Change of Address; Ownership/Name Change
N/A	O-0002-17-V	13 Jun 2017	06 May 2017	Renewal	Entire Permit	Renewal, change permit number format Incorporate Construction Permit: 31887-11-C

6. Construction Permit History:

Permit No.	Effective Date	Description
31887-11-C	31 May 2011	One (1) new Wheelabrator Baghouse (No. 9 Model 126-D K.D.) replacing cartridge-type dust collector C14a that control emissions from the existing #1 Open Head Drum Blaster E14a.

7. Permit Renewal Related Documents:

Document Number	Date Received	Description
75725	03 Mar 2016	Permit renewal application
76554	07 Apr 2016	Request for additional application information
76778	26 Apr 2016	Receipt of additional paint usage information and Cert of Authority
76781	27 Apr 2016	"Administratively complete" verification letter from the District
80399	09 Jun 2016	Letter to Industrial Container requesting updated EA Demo
78864	10 Aug 2016	Updated EA Demo response
80372	27 Sep 2016	40 CFR 63, Subpart DDDDD Notice and Action Required

Document Number	Date Received	Description
81057	29 Dec 2016	Initial Notification of Applicability – 40 CFR 63, Subpart DDDDD
81516	17 Jan 2017	Request for Initial Tune-up schedule
81517	27 Jan 2017	Energy Assessment and Boiler Tune-up results
81518	30 Jan 2017	Request for Notice of Compliance Status
82279	01 Mar 2017	Notice of Compliance Status

8. Emission Summary:

Pollutant	District Calculated Actual Emissions (tpy) 2015 Data	Pollutant that triggered Major Source Status (based on PTE)
CO	2.17	No
NOx	3.15	No
SO2	0.02	No
PM10	21.5	Yes
VOC	22.4	Yes
Total HAPs	4.24	Yes
Single HAP > 1 tpy		
Xylene	2.24	Yes
Ethylbenzene	0.57	Yes
Triethylamine	0.0095	Yes
Methanol	0.064	Yes

9. Applicable Requirements

☐ PSD ☐ 40 CFR 60 ☒ 40 CFR 63 ☒ SIP
☐ NSR ☐ 40 CFR 61 ☒ District Origin ☒ Other

10. Referenced MACT Federal Regulations:

40 CFR Part 63 Subpart A - *General Provisions*
40 CFR Part 63 Subpart MMMM - *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products*

40 CFR 63, Subpart DDDDD - *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*

11. Referenced non-MACT Federal Regulations:

40 CFR Part 64 - *Compliance Assurance Monitoring*.

II. Regulatory Analysis

1. Acid Rain Requirement

Company 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. Company 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):

Company 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:

Industrial Container Services is subject to 40 CFR Part 64 - Compliance Assurance Monitoring for Major Stationary Sources because they use "a control device to achieve compliance with [an] emission limitation or standard" [40 CFR 64.2(a)(2) and "the unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source"]

5. Basis of Regulation Applicability

a. Plantwide

i. Industrial Container Services – KY, LLC is a Title V major source for VOC, PM_{10}, Total HAP, and Single HAP. Regulation 2.16 - *Title V Operating Permits* establishes requirements for major sources.

ii. 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. Industrial Container Services submitted their TAC Environmental Acceptability Demonstration to the District on February 7 2007 and April 17, 2007. Updates based on changed paint formulations, were submitted on August 8, 2016. This analysis showed that all TAC emissions met environmental acceptability goals except for manganese emissions from one piece of abrasive blast equipment. Appropriate emission limits have been set for this TAC to ensure that the non-carcinogenic health quotient for this material complies with the STAR EA goals established in Regulation 5.21.

TAC		E1		E6	E10	E14f controlled
		R_c	R_{NC}	R_c	R_c	R_{NC}
Industrial	Formaldehyde	- - -	- - -	0.49	0.43	- - -
	Manganese	- - -	- - -	- - -	- - -	1.4
	Chromium compounds	1.51	.02	- - -	- - -	- - -
Non-Industrial	Formaldehyde	- - -	- - -	0.17	0.34	- - -
	Manganese	- - -	- - -	- - -	- - -	0.80
	Chromium compounds	.93	.01	- - -	- - -	- - -

iii. The plantwide modeled risk summary is shown in this table.

Plantwide Sum	All Existing and New		All new P/PE	
	Actual	Goal	Actual	Goal
Industrial Total R_C	2.43	< 75	0.0	< 38
Non-Ind. Total R_C	1.44	< 7.5	0.0	< 3.8
Industrial Max. R_{NC}	1.40	<3.0		
Non-Ind. Max. R_{NC}	0.80	<1.0		

iv. Regulation 2.16, section 4.1.9.1 and 4.1.9.2 requires monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit. The owner or operator shall maintain all the required records for a minimum of 5 years and make the records readily available to the District upon request.

v. Regulation 2.16, section 4.3.5, requires stationary sources for which a Title V is issued shall submit an annual compliance certification by April 15 of the following calendar year. In

addition, as required by Regulation 2.16, section 4.1.9.3, the source shall submit compliance reports at least every six months to show compliance with the permit. Compliance reports and compliance certifications shall be signed by a responsible official and shall include a certification statement per Regulation 2.16, section 3.5.11.

b. Emission Unit U1 - Drum Reclamation Furnace

i. Equipment:

Emission Point	Description	Applicable Regulation	Basis for Applicability
E1	Drum Reclamation Furnace	STAR[1], 1.05, 7.08, 7.25	STAR regulations establish the requirements for Environmental Acceptability for TACs. The source is a Group I company with Category 1 TACs that potentially could exceed the *de minimis* values. Regulation 7.25 establishes VOC emission standards and equipment requirements for sources that emit VOCs and are not otherwise regulated for these emissions. Regulation 7.08 establishes PM and NO_x emission standards for new processes.

ii. Standards/Operating Limits

(1) NO_X

(a) Regulation 7.08, section 4 establishes a NO_X emission limit by volume, expressed as NO_2. The source conducted stack testing in 2005 which demonstrated an uncontrolled NO_X emission rate of 61 ppmv.

(2) Opacity

(a) Regulation 7.08, section 3.1.1 establishes opacity standards for new equipment.

[1] The STAR regulations comprise APCD regulations 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23.

(3) PM

(a) Regulation 7.08, section 3 establishes a pound-per-hour PM emission standard, based on the process weight rate. The PM limits are calculated per Regulation 7.08, section 3.1.2. The source conducted stack testing in 2005 which resulted in an actual uncontrolled PM emission rate of 1.63 lb/hr.

(4) TAC

(a) Regulation 5.21, section 4.2 requires demonstration of environmental acceptability for all TACs emitted from any emission point. Emission of chromium compounds was modeled (SCREEN3) and it was determined that EA goals could not be achieved at the potential emission rate. Emission limits were set to assure that emissions of chromium compounds would meet the established EA goals.

(5) VOC

(a) Regulation 7.25 establishes Best Available Control Technology (BACT) requirements for affected facilities with potential VOC emissions greater than 5 tons per year of VOC. The oxidizer/afterburner that is part of this emission unit is considered BACT for VOC, with an average control efficiency of 99.7%, based on stack testing conducted in 2011.

c. Emission Unit U2 - Surface Coating Operation and Emission Unit U3 - Surface Coating Operation

i. U2 Equipment:

Emission Point	Description	Applicable Regulation	Basis for Applicability
E2	Paint booth: 55 and 30 gallon drums	STAR, 1.05, 5.02, 6.09, 6.31, 40 CFR 63, Subpart MMMM, 40 CFR 63, Subpart A	STAR regulations establish the requirements for Environmental Acceptability for TACs. The source is a Group I company with Category 1 TACs that potentially could exceed the *de minimis* values. Regulation 6.09 establishes opacity and PM emission rate standards for equipment constructed before September 1976 and not regulated by other Chapter 6 PM regulations. Regulation 6.31 establishes VOC emission standards and requirements for facilities that coat (paint) miscellaneous metal surface and were constructed before May 1981. Regulation 40 CFR 63, subpart MMMM establishes national emission standards for hazardous air pollutants for miscellaneous metal parts and products surface coating facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.
E9	Paint booth: Open-head drums		

Emission Point	Description	Applicable Regulation	Basis for Applicability
E5	Paint booth: Drum lining #1	STAR, 1.05, 5.02, 7.08, 7.59, 40 CFR 63, Subpart MMMM, 40 CFR 63, Subpart A	STAR and 40 CFR 63, Subpart MMMM applicability as above. Regulation 7.08 establishes opacity and PM emission rate standards for equipment constructed after September 1976 and not regulated by other Chapter 7 PM regulations. Regulation 7.59 establishes VOC emission standards and requirements for facilities that coat (paint) miscellaneous metal surface and were constructed after May 1981.
E6	Paint booth: Drum lining #2		
E10	Paint booth: Drum lids		
E3	Drum and Lid drying oven, 3.5 MMBtu/hr	STAR, 1.05, 5.02, 6.31 or 7.59, 40 CFR 63, Subpart MMMM, 40 CFR 63, Subpart A	STAR, 6.31, 7.59, and 40 CFR 63, Subpart MMMM applicability as above.
E4	Drum and Lid drying oven, 3.5 MMBtu/hr		
E7	Lining Oven, 3.5 MMBtu/hr		
E8	Lining Oven, 3.5 MMBtu/hr		

ii. U3 Equipment:

Emission Point	Description	Applicable Regulation	Basis for Applicability
E11	Paint booth: 16 gallon drums	STAR, 1.05, 5.02 7.08, 7.59, 40 CFR 63, Subpart MMMM 40 CFR 63, Subpart A	STAR and 40 CFR 63, Subpart MMMM applicability as above. Regulation 7.08 establishes opacity and PM emission rate standards for equipment constructed after September 1976 and not regulated by other Chapter 7 PM regulations. Regulation 7.59 establishes VOC emission standards and requirements for facilities that coat (paint) miscellaneous metal surface and were constructed after May 1981.
E31	Paint booth: 85 gallon overpack drums		

iii. Standards/Operating Limits

(1) HAP

(a) The NESHAP regulation (40 CFR 63, Subpart MMMM) sets forth HAP emission standards for a source that is part of a major source of HAP that uses more than 250 gallons per year of coating material.

(2) Opacity

(a) Regulations 6.09 and 7.08 establish an opacity standard.

(3) PM

(a) Regulations 6.09 and 7.08 establish PM emission standards for equipment based on process rate weights.

(4) TAC

(a) TAC standards are discussed in the Plantwide Standards, earlier.

(5) VOC

(a) Regulations 6.31 and 7.59 (for process equipment constructed before and after May 20, 1981, respectively) establish a coating VOC content emission standards for several classifications of coating materials.

iv. Monitoring and Record Keeping

(1) HAP

(a) Specific monitoring and recordkeeping requirements to assure compliance with the HAP emission standards are set forth in 40 CFR 63, Subpart MMMM.

(2) VOC

(a) Regulations 6.31 and 7.59 establish requirements to monitor and maintain records of the VOC content of the coatings, as applied.

iv. Reporting

(1) HAP

(a) Specific reporting requirements to assure compliance with the HAP emission standards are set forth in 40 CFR 63, Subpart MMMM.

d. Emission Unit U4 - Natural Gas fired Boiler

i. Equipment:

Emission Point	Description	Applicable Regulation	Basis for Applicability
E13	25.2 MMBtu/hr natural gas-fired boiler	STAR 6.07, 40 CFR 63, Subpart DDDDD	STAR regulations establish the requirements for Environmental Acceptability for TACs. The source is a Group I company with Category 1 TACs that potentially could exceed the *de minimis* values. 6.07 establishes PM and SO_2 emission standards for existing (pre-April 1972) indirect heat exchangers. 40 CFR 63, subpart DDDDD establishes national emission standards for hazardous air pollutants for industrial boilers. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

ii. Standards/Operating Limits

(1) HAP

(a) The NESHAP regulation (40 CFR 63, Subpart DDDDD) establishes operating and maintenance practices for industrial boilers.

(2) Opacity

(a) Regulation 6.07 establishes an opacity standard.

(3) PM

(a) Regulation 6.07 establishes an emission standard calculated as follows:

$$Y = 0.9634\ X^{-0.2356}$$

Where:

Y = Allowable lb_{PM}/(MMBtu/hr) actual heat input capacity

X = million Btu per hour heat input capacity

(4) SO_2

(a) Regulation 6.07 establishes an emission standard based on heat input capacity.

(5) TAC

(a) TAC emissions from natural gas combustion are *de minimis*, as defined in Regulation 5.21, section 2.7.

iii. Monitoring and Record Keeping

(1) HAP

(a) Documents demonstrating the completion of the required annual tune-up and other related actions must be kept by the operator as required by 40 CFR 63 Subpart DDDDD.

iv. Reporting

(1) HAP

(a) Notice that the required annual tune-up has been completed must be submitted. This submission can be incorporated as part of the required Title V annual report as required by 40 CFR 63 Subpart DDDDD.

e. Emission Unit U5 - Abrasive Blast Cleaning Units

i. Equipment:

Emission Point	Description	Applicable Regulation	Basis for Applicability
E14a	Openhead drum blaster #1,Pangborn, 126 klb/hr	STAR, 6.09, 40 CFR 64	These sources emitted no Category 1 TACs, and no Category 2 TACs were reported on the 2006 TRI. Based on the the dates of construction, Category 3 and 4 TACs are not regulated. Regulation 6.09 establishes opacity and PM emission rate standards for equipment constructed before September 1976 and not regulated by other Chapter 6 PM regulations. Each emission point satisfies the 3 applicability requirements in §64.2(a).
E14c	Tighthead blaster, Wheelabrator, 75 klb/hr		
E14b	Openhead drum blaster #2, Pangborn, 126 klb/hr,	STAR, 7.08, 40 CFR 64	STAR applicability as above. Regulation 7.08 establishes opacity and PM emission rate standards for equipment constructed after September 1976 and not regulated by other Chapter 7 PM regulations. 40 CFR 64, as above
E14e	Ring blaster, Wheelabrator, 30 klb/hr		
E14f	Lid blaster, Wheelabrator, 19.2 klb/hr	STAR, 7.08, 40 CFR 64	STAR applicability as above, except that Category 3 and 4 TACs must be evaluated. Regulation 7.08 and 40 CFR 64, as above

ii. Standards/Operating Limits

(1) Opacity

(a) Regulation 7.08, section 3.1.1 and Regulation 6.09, section 3.1 establish an opacity standard.

(2) PM/PM_{10}

(a) PM emission limits are calculated using the

appropriate equation in Regulation 6.09 or 7.08. These equations are used to calculate the emission limit based on process throughput.

(3) TAC

(a) Regulation 5.21, section 4.2 requires demonstration of environmental acceptability for all TACs emitted from any emission point. All TACs from the emission points at this emission unit were determined to be *de minimis* at the maximum potential to emit except for manganese from E14f. SCREEN3 air dispersion modeling demonstrated that emissions of this material at this rate could not achieve the EA goals without further limits. Therefore, an emission limit was established that will insure that these EA goals will not be exceeded.

iii. Monitoring and Record Keeping

(1) PM/PM_{10}

(a) The source is subject to the requirements in 40 CFR Part 64 for the baghouses that control PM emissions from the abrasive blast cleaning units. The source is required to monitor the pressured drop and/or conduct visible emission surveys for each baghouse.

f. Emission Unit U7 - Insignificant Activities with Regulatory Requirements

i. Equipment:

Emission Point	Description	Applicable Regulation	Basis for Applicability
E32	Diesel fuel storage tank	STAR, 6.13	This regulation is applicable to all existing (pre-Sept 1976) VOC storage tanks
E33	Cold solvent parts washer with secondary reservoir	STAR, 6.18	This regulation is applicable to all solvent-based metal cleaning equipment.

Emission Point	Description	Applicable Regulation	Basis for Applicability
E34	Plastic barrel grinding and storage	6.09, 6.24	Regulation 6.09 establishes opacity and PM emission rate standards for equipment constructed before September 1976 and not regulated by other Chapter 6 PM regulations. Regulation 6.24 applies to any affected facility using any organic materials which was in being or had a construction permit issued by the District prior to June 1979

ii. Standards/Operating Limits

(1) Opacity

Regulation 6.09, section 3.1 establish an opacity standard.

(2) PM

(a) Regulation 6.09 limits PM emissions from PM emission points that are not regulated by other specific regulations.

(3) TAC

(a) TAC emissions from insignificant activities are *de minimis*, as defined in Regulation 5.21, section 2.3.

(4) VOC

(a) Regulation 6.13 establishes VOC equipment requirements for storage tanks (E32).

(b) Regulation 6.18 sets forth the vapor pressure limit for cold solvent parts washers. (E33) and equipment requirements.

(c) Regulation 6.24 establishes VOC emission standards for emission point E34 as there are incidental emission of VOCs from residual product remaining in plastic barrels when they are shredded.

iii. Monitoring and Record Keeping

(1) VOC

(a) Regulation 6.18 establishes record keeping requirements.

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 operational flexibility.

5. Compliance History:

Date	Regulation Violated	Result
07 Dec 1994	Reg 1.13 – Odors Reg 2.03 – Permit	Agreement
16 Nov 1995	Reg 1.13 – Odors Reg 1.11 – Open burning	Admin agreement
29 Apr 1997	Reg 2.16 – Late Title V application	Agreement
09 Sep 1997	Reg 2.03 – Permit condition	Agreement
28 Jan 1998	Reg 1.13 - Odors	Agreement
28 Feb 2008	Reg 2.16 – Opacity	Agreement
09 Jun 2014	Reg 1.13 – Odors	Agreement

6. Calculation Methodology or Other Approved Method:

In general, emissions are calculated by multiplying the process throughput or hours of operation by the emission factor and by the control efficiency of any control device. For example:

$$E_x = \left(throughput\left[\frac{lb}{hr}\right]\right) \bullet \left(Emission\ factor\left[\frac{lb\ emission}{lb_{thruput} hr\ of\ operation}\right]\right) \bullet (1 - control\ efficiency)$$

Alternatively, the mass balance method considers the total throughput and the fraction of that throughput that is made up by the pollutant under consideration. For example:

$$E_x = \left(throughput\left[\frac{gal}{yr}\right]\right) \bullet (pollutant\ percentage) \bullet (1 - control\ efficiency)$$

Other methods of emission calculation may be used if first proposed to and approved in writing by the District.

Emission Source		Description	Pollutant	Emission factor	Source	Control Effic.	Note
Unit	Point						
U1	E1	Drum reclamation furnace with afterburner	PM	1.63	Stack test	N/A	1, 2, 3
			PM_{10}	0.30			
			$PM_{2.5}$	0.30			
			TAC VOC HAP	As reported by 'AirTrace' or other approved tracking software		99.7%	4
		Natural gas combustion in furnace and afterburner	CO NO_x PM [2] SO_2 VOC HAP Lead	84 100 7.6 0.6 5.5 See table 0.0005	AP42, Chap. 1.4	N/A	5
U2	E2	Paint booth for 30- and 55-gallon drums	HAP PM TAC VOC	Mass balance method		- - -	- - -
	E5	Paint booth #1 for open-head drum lining					
	E6	Paint booth #2 for open-head drum lining					
	E9	Paint booth for open-head drums					
	E10	Paint booth for drum lids					
	E3	Drum and lid oven	CO NO_x PM [2] SO_2 VOC HAP Lead	84 100 7.6 0.6 5.5 See table 0.0005	AP42, Chap. 1.4	N/A	5
	E4	Drum and lid oven					
	E7	Lining Oven					
	E8	Lining oven					
U3	E11	Paint booth for 16-gallon drums	HAP PM TAC VOC	Mass balance method		- - -	- - -
	E31	Paint booth for 85-gallon overpack drums					

[2] For natural gas combustion, PM = PM_{10} = $PM_{2.5}$.

Emission Source		Description	Pollutant	Emission factor	Source	Control Effic.	Note
Unit	Point						
U4	E13	25.2 MMBtu natural gas-fired boiler	CO NO_x PM [2] SO_2 VOC HAP Lead	84 100 7.6 0.6 5.5 See table 0.0005	AP42, Chap. 1.4	N/A	5
U5	E14a	Open head blaster #1	PM	0.069	AP42, Table 13.2.6-1	Note 7	6, 9
	E14b	Open head blaster #2					
	E14c	Tight head blaster					
	E14e	Ring blaster					
	E14f	Lid blaster	TAC	Mass balance method		- - -	8
U7	E32	Diesel fuel storage tank	VOC	TANKS, or equivalent		- - -	- - -
	E33	Cold solvent parts washer	VOC	Mass balance method		- - -	- - -
	E34	Plastic barrel grinding and storage	VOC	As reported by 'AirTrace' or other approved tracking software		- - -	- - -
			PM	0.35	Note 10	- - -	11
IA		Soil and groundwater remediation	VOC	Engineering estimate		- - -	- - -
		Heat treating, etc using natural gas	CO NO_x PM [2] SO_2 VOC HAP Lead	84 100 7.6 0.6 5.5 See table 0.0005	AP42, Chap. 1.4		5
		Office space heaters	CO NO_x PM [2] SO_2 VOC HAP Lead	84 100 7.6 0.6 5.5 See table 0.0005	AP42, Chap. 1.4		5
		Yard storage of RCRA-empty drums	VOC	As reported by 'AirTrace' or other approved tracking software		- - -	- - -
		Wastewater treatment activities	SO_2	Engineering estimate		- - -	- - -
		Neutralization of corrosive wastes	SO_2	Engineering estimate		- - -	- - -

Notes

1. Emission factor units are pounds of PM per hour of operation (lb/hr)
2. The PM emission factor was determined during May 2005 stack test. This stack test is due to be re-evaluated (U1.S4.b). This emission factor will be updated with the new factor determined during that test.
3. During the May 2005 stack test only PM and condensable PM were measured. For this table the condensable PM is assumed to be equivalent to PM_{10} and $PM_{2.5}$. During the updated stack test to be completed under the terms of this permit (see U1.S4.b) explicit measurements of PM_{10} and $PM_{2.5}$ will be required. Until this test is completed the values shown here may be used.
4. Control efficiency determined during stack test performed 22 Feb 2011.
5. Emission factor units are pounds of pollutant per million cubic feet of natural gas burned, (lb/MMscf).
6. Emission factor units are pounds of pollutant per 1000-pounds of abrasive circulated, (lb/1000-lb).
7. This emission factor is for controlled emissions. When calculating uncontrolled emissions divide the calculated emissions by (1-0.95) (or other approved control efficiency if stack testing has been performed) to account for the control efficiency of the control device assumed in AP-42.
8. HAP emissions are calculated by multiplying the PM mass emission by the percentage of HAP in the abrasive material.
9. Emissions are calculated by multiplying the emission factor given times the maximum capacity of the blast equipment per hour times the hours of operation. [$PM = EF \times \left({}^{lb_{abrasive}}/_{hr}\right) \times hours\ of\ operation$]
10. No values for PM emissions from plastic shredding could be found in open literature. As an upper limit APCD believes that woodworking can serve as a surrogate process. The emission factor quoted here is for wood sawing at a sawmill, and comes from an EPA Region 10 Memorandum: *Particulate Matter Potential to Emit Emission Factors for Activities at Sawmills, …*, dated 8 May 2014 [https://www.epa.gov/sites/production/files/2016-09/documents/spmpteef_memo.pdf]
11. Emission factor units are pounds of PM per ton of processed material. Typical plastic barrel weight is 25 pounds each.

7. Insignificant Activities

Equipment	Qty	PTE (tpy)	Regulation Basis
Storage tanks - diesel fuel, 550 gallon (See Emission Unit U7)	1	<0.01	Regulation 1.02, Appendix A, §3.25
Soil or groundwater remediation (passive)	1	VOC < 1.0	Regulation 1.02, Appendix A, §3.20
Emergency Relief Vents or ventilating systems	2	0.00	Regulation 1.02, Appendix A, §3.10
Heat-treating, soaking, case-hardening or surface conditioning of metal objects – using natural gas	2	NO_x: .04	Regulation 1.02, Appendix A, §3.14
Washing or Drying Fabricated metal	2	0.00	Regulation 1.02, Appendix A, §3.15

Equipment	Qty	PTE (tpy)	Regulation Basis
Office Space Heaters- direct fired units	2	NO_X: .04	Regulation 2.16, section 1.23
Cold Solvent Parts Cleaner with Secondary Reservoir (See Emission Unit U7)	1	VOC < 1.0	Regulation 1.02, Appendix A, §3.22
Plastics handling, grinding and regrind storage (See Emission Unit U7)	1	VOC: 1.4 PM: 2.41	Regulation 2.16, section 1.23
Yard storage of RCRA-empty steel drums and bulk totes all are less than 250 gallons each	78	VOC: < 5 HAP: <0.5	Regulation 1.02, Appendix A, §3.24
Wastewater treatment operations/activities	1	0.01 SO_X	Regulation 2.16, section 1.23.1.2
Elementary neutralization of corrosive wastes in containers (neutralize high-pH NaOH waste with H_2SO_4)	1	0.01 SO_X	Regulation 2.16, section 1.23.1.2

1. Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.
2. Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.
3. The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
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 shall submit an updated list of insignificant activities that occurred during the preceding year pursuant to Regulation 2.16 section 4.3.5.3.6.
6. 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) to be reported on the annual emission inventory.
7. The District has determined pursuant to Regulation 2.16 section 4.1.9.4 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.

8. Source-Wide Activities Not Otherwise Regulated: [3]

Equipment Description	Quantity	Make	Model
Bulk storage of non-VOC raw materials (NaOH)	1	N/A	N/A
Internal Combustion Engine Fixed or Mobile	15	N/A	N/A
Maintenance Brazing, soldering or welding	4	N/A	N/A

[3] This table is for informational purposes only. The listed equipment emits zero or negligible air pollutants. There are no compliance monitoring, recordkeeping, or reporting requirements for any of the listed equipment.