

REVIEW REPORT

Bulk Handling Systems

460 North Danebo Avenue
 Eugene, OR 97402
 Website: www.bulkhandlingsystems.com

Permit No. 200575

Source Information:

SIC	3559
NAICS	333999

Source Categories (LRAPA Title 37, Table 1)	B.69: Surface coating operations whose actual or expected usage of coating materials is greater than 250 gallons per month C.6: Source with Potential to Emit more than 10 tons of a single HAP per year
Public Notice Category	II

Compliance and Emissions Monitoring Requirements:

Unassigned emissions	n
Emission credits	n
Compliance schedule	n
Source test date	n

COMS	n
CEMS	n
Ambient monitoring	n

Reporting Requirements:

Semi-annual reports (due dates)	July 15 February 15
SACC (due date)	n
Quarterly report (due dates)	n

Monthly report (due dates)	n
Excess emissions report	y
Other reports	n

Air Programs:

NSPS (list subparts)	n
NESHAP (list subparts)	n
CAM	n
Regional Haze (RH)	n
Synthetic Minor (SM)	y
Part 68 Risk Management	n
Title V	n
ACDP (SIP)	n
New Source Review (NSR)	n
Prevention of Significant Deterioration (PSD)	n
Acid Rain	n
Clean Air Mercury Rule (CAMR)	n
TACT	y

General Background Information

1. Bulk Handling Systems operates a facility at 460 North Danebo Avenue in Eugene, Oregon that manufactures equipment used in the recycling and separating industry. The facility operates approximately 3,120 hours per year (10 hours per day, 6 days per week and 52 weeks per year). The emission activities located at the facility are the following:

Emission Unit (EU)	EU-ID	Devices	Device ID
Surface Coating Operations	EU-Surface Coating	Two (2) Paint Booths	#1A and #2B
Welding Activities	EU-Welding	NA	NA

Reasons for Permit Issuance

2. The facility operates a process listed in LRAPA Title 37, Table 1 Part B.69 – Surface coating operations whose actual or expected usage of coating materials is greater than 250 gallons per month, excluding sources that exclusively use non-VOC and non-HAP containing coatings and is, therefore, required to obtain a permit. This is an existing facility applying for a renewed permit as a Standard ACDP. Due to the facility’s potential to emit above the Hazardous Air Pollutant (HAP) major source threshold for a single HAP, the facility must obtain a Standard ACDP as required in LRAPA Title 37, Table 1 Part C.6. Lane Regional Air Protection Agency (LRAPA) has reviewed the permit renewal application received on March 27, 2017. The contents of the application and additional correspondence with the facility were the basis for the calculations and content within this review report. The primary reason for this permit action is to renew the expired permit.

New Source Review (NSR) and Prevention of Significant Deterioration (PSD)

3. Since the proposed PSELs for all regulated pollutants are below the Significant Emission Rates (SERs) in LRAPA Title 12, the facility is not subject to LRAPA’s New Source Review (NSR) requirements for PM₁₀ nor the Prevention of Significant Deterioration (PSD) requirements for SO_x, NO_x, CO and VOC.

Enforcement Actions

4. The facility was issued a Notice of Non-Compliance (NON No. 3598) on January 20, 2016 and a Notice of Civil Penalty (NCP No. 16-3598) on January 26, 2016 for failing to submit the semi-annual reports for the 2014 reporting year and the semi-annual report for July 15th, 2015. The requirement to submit semi-annual reports came into effect on October 26, 2012, with the issuance of the facility’s Standard ACDP, which was a reevaluation of the permit type required for the facility determined from review of the Eugene Toxics Right to Know reporting indicating the potential to emit over the major source threshold for an individual HAP. LRAPA assessed a civil penalty of \$2,100, with a final order issued on March 28, 2016, for the full amount of the assessed civil penalty. The facility paid \$2,100 on March 30, 2016, and the case was closed.
5. The facility was issued Notice of Non-Compliance (NON No. 3042) on July 31, 2008, for operating an air contaminant source without first having obtained an Air Contaminant Discharge Permit (ACDP). On November 27, 2007, the facility submitted an application to LRAPA for an ACDP, but LRAPA subsequently determined that an ACDP should have been obtained by the facility as early as January 2003. The facility was issued a Minimal ACDP (No. 200575) by LRAPA on October 8, 2008. As reconciliation to NON 3042, LRAPA proposed to assess permit

fees in the amount of \$2,255 for the period of January 2003 through December 31, 2007. The facility paid the past due permit fees in the amount of \$2,255 on December 22, 2008, and the enforcement file was closed.

Source Tests

6. No source testing has been performed at this facility. Safety Data Sheets (SDS), Certified Product Data Sheets, and material usage are used to determine the facility's VOC and HAP(s) emissions.

Typically Achievable Control Technology (TACT)

7. LRAPA 32-008 requires an existing emission unit at a facility to meet TACT if the emission unit meets the following criteria: the emissions of criteria pollutants are greater than five (5) tons per year of particulate or ten (10) tons per year of any gaseous pollutant, the emission unit is not subject to the emissions standards under LRAPA Title 30, Title 32, Title 33, Title 38, Title 39, or Title 46 for the pollutants emitted, and the facility is required to have a permit. The facility emits greater than ten (10) tons per year of VOC and is, therefore, required to meet TACT. While a formal TACT determination has not been conducted, LRAPA has determined that the airless spray guns likely meet the TACT requirement for this facility.

New Source Review (NSR) and Prevention of Significant Deterioration (PSD)

8. Since the proposed PSEs for all regulated pollutants are below the Significant Emission Rates (SERs) in LRAPA Title 12, the facility is not subject to LRAPA's New Source Review (NSR) requirements for PM₁₀ nor the Prevention of Significant Deterioration (PSD) requirements for SO_x, NO_x, CO and VOC.

Hazardous Air Pollutants (HAP)

9. A major source is a facility that has the potential to emit 10 tons/year or more of any single HAP or 25 tons/year or more of combined HAPs. This source is not a major source of hazardous air pollutants because the facility does not currently emit HAPs above the major source levels and the facility has accepted PSEs for HAPs that limit the potential to emit to less than the major source levels, which are federally enforceable operational limits. HAP Potential to Emit and recent 2017 HAP emissions calculations are in the attachment to this review report. Total HAP emissions from 2017 were estimated at 4.77 tons/year with the highest single HAP emissions for Xylene estimated at 3.62 tons/year.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

10. The facility spray-applies coatings to metal surfaces of miscellaneous products that could be mobile, such as towed behind a vehicle, which makes the operations at the facility potentially subject to the Subpart 6H National Emission Standard for Hazardous Air Pollutants (NESHAP) for area sources. The facility has certified that spray-applied coatings at the facility do not contain one or more of the following HAPs: cadmium, chromium, manganese, nickel, or lead. Therefore, the facility is not subject to the Subpart 6H NESHAP.
11. The facility is not subject to the Subpart 6X Metal Fabrication NESHAP because the facility is not classified in one of the nine major industrial groups subject to the rule. The facility manufactures recycling and material sorting equipment and is classified as Standard Industrial Code (SIC) 3559

- Special Industrial Machinery, Not Elsewhere Classified. An alternative SIC code that also fits the facility's operations is SIC 3569 – General Industrial Machinery and Equipment, Not Elsewhere Classified, specifically the subcategory of the SIC of “Sifting and screening machines for general industrial use” and/or “Baling machines for scrap metal, paper and similar products.”

Emissions

Pollutant	Baseline Emission Rate	Plant Site Emission Limit (PSEL)			Increase from Baseline	SER
	(tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)	(tons/yr)	(tons/yr)
PM	0	0	0	0	0	25
PM ₁₀	0	0	0	0	0	15
PM _{2.5}	N/A	0	0	0	0	9
VOC	0	39	39	0	39	40
Single HAP	N/A	9	9	0	N/A	10
Total HAP	N/A	24	24	0	N/A	25

12. The Baseline Emission Rate is set at zero (0) tons per year for PM, PM₁₀, and VOC, since this facility was not in operation during the 1978 baseline year. A baseline emission rate is not required for PM_{2.5} in accordance with the definition of “baseline emission rate” in LRAPA Title 12.
13. The facility has the potential to emit over the de minimis levels for VOC, Single HAP and Total HAP, so the proposed PSELs are included at the Generic PSEL as defined in LRAPA Title 12. No PSELs for PM, PM₁₀, or PM_{2.5} are set because the potential to emit is less than the de minimis level of one (1) ton per year for PM, PM₁₀, and PM_{2.5}. The plant site particulate matter emission calculation sheet is attached to this review report.
14. The PSEL increase over the baseline is less than the SER, as defined in LRAPA Title 12 for all criteria pollutants, so no further air quality analysis is required.

Additional Emission Limitations

15. The facility is subject to the visible emissions standards in LRAPA 32-010(3), the particulate grain-loading standard in LRAPA 32-015(2)(b)(B), the highest and best requirement of LRAPA 32-005. Operation of well-maintained paint booth filters should assure compliance with the grain-loading and visible emissions limits. The facility is also required to meet operational and work practice requirements for spray-applied coating and welding operations in order to ensure emissions are minimized to the greatest extent possible.

Recordkeeping Requirements

16. A record of the following data is required to be maintained for a period of at least five (5) years from the date of entry at the facility:

Activity	Parameter	Units	Recording Frequency
VOC/HAP-containing Material Usage	Material Usage	Gallons	Monthly
VOC/HAP-containing Material Usage	Density of Material	Pounds per Gallon	Maintain current information
VOC-containing Material Usage	VOC Content	% By Weight	Maintain current information
HAP-containing Material Usage	HAP Content	% By Weight	Maintain current information
Welding	Welding Rods Used/Consumed	lbs/month by type	Monthly
Spray Booth Filter Replacement	Occurrence	NA	Upon Replacement

Reporting Requirements

17. The facility is required to submit semi-annual reports that include the 12-month rolling emissions calculations, recordkeeping requirements, and any entries in the upset log as required by permit Condition G15. The first semi-annual report is due **July 15th** of each year and the second semi-annual report is due **February 15th** of each year.

Public Notice

18. The draft permit was on public notice from September 28, 2018 to November 1, 2018. No written comments were submitted during the 35-day comment period.

KE/CMW
11/02/2018

VOC and HAP Emissions Calculations for Surface Coating Operations

Pollutant	2012 Emissions (highest) tons/year	2017 Emissions (recent) tons/year	Potential to Emit (based on 2012) ⁽¹⁾ tons/year
Non-HAP VOC			
Aliphatic Petroleum Distillates	3.26	1.39	6.8
Ethelene Glycol Monobutyl Ether	0.14	0.08	0.3
Isobutyl Alcohol	1.51	0.68	3.1
Mineral Spirits	1.06	0.61	2.2
Propoxypropanol	0.03	0.01	0.1
VM&P Naphtha	1.86	0.68	3.9
HAP			
Ethyl Benzene	1.75	0.79	3.6
Glycol Ether	0.17	0.08	0.4
Styrene	0.02	0.02	0.0
Toluene	0.36	0.20	0.8
Triethylamine	0.07	0.06	0.2
Xylene	7.31	3.62	15.2
Exempt VOC			
Acetone	27.77	18.98	57.6
HAP Total			
	9.68	4.77	20.08
VOC Total			
	17.54	8.22	36.39

⁽¹⁾NOTE: Potential to Emit for the facility was calculated creating a ratio by dividing the maximum yearly operation of 8,760 hours by the 4,222 total operational hours in 2012 and multiplying the actual emissions from 2012 by this ratio. The emissions from 2012 are the highest emission recorded for the facility since they began reporting to LRAPA.

PM Emissions Calculations for Welding Activities

Year	Welding Rod/Wire Used (lbs)	Emission Factor (lb/1000 lb electrode consumed) ⁽¹⁾	PM ₁₀ Emissions (ton/year) ⁽²⁾
2012	34983	24.1	0.42
2013	41600	24.1	0.50
2015	8294	24.1	0.10
2016	19356	24.1	0.23
2017	21955	24.1	0.26

⁽¹⁾NOTE: Emission factor from AP-42 Table 12.19-1 PM-10 Emission Factors for Welding Operations referencing the GMAW Welding Process and utilizing the worst-case scenario emission factor for the ER5154 electrode type.

⁽²⁾NOTE: Emissions are under the de minimis value of one (1) ton per year. No PSEs for particulate matter (PM), PM₁₀ or PM_{2.5} are required. Assumption that PM = PM₁₀ = PM_{2.5}.

HAP Emissions Calculations for Welding Activities

	EF (lb/1000 lb consumed) ⁽¹⁾	Electrode Type
Cr	0.528	ER316
Cr ^(VI)	0.01	ER316
Co	0.01	E308
Mn	0.346	E308
Ni	0.226	ER316
Pb	0	ND for GMAW

⁽¹⁾NOTE: Emission factor from AP-42 Table 12.19-2 Hazardous Air Pollutant (HAP) Emission Factors for Welding Operations referencing the GMAW Welding Process and utilizing the worst-case scenario emission factor each pollutant. The electrode type associated with the EF is also listed in the table above.

Year	Welding Rod/Wire Used (lbs)	HAP Emissions				
		Cr (lb/yr)	Cr ^(VI) (lb/yr)	Co (lb/yr)	Mn (lb/yr)	Ni (lb/yr)
2012	34983	11.59	0.22	0.22	7.60	4.96
2013	41600	10.22	0.19	0.19	6.70	4.37
2015	8294	4.38	0.08	0.08	2.87	1.87
2016	19356	10.22	0.19	0.19	6.70	4.37
2017	21955	11.59	0.22	0.22	7.60	4.96