

**Lane Regional Air Protection Agency
Simple Air Contaminant Discharge Permit**

Review Report

A&K Development Company/Pacific Metal Fab LLC

135 East 1st Avenue
Junction City, OR 97448
Website: <https://akdco.net/>

Permit No. 200059

Source Information:

SIC	3556
NAICS	333241
Source Categories	Part B: 69. Surface coating operations: coating operations

(LRAPA title 37, Table 1)	whose actual or expected usage of coating materials is greater than 250 gallons per month.
Public Notice Category	III

Compliance and Emissions Monitoring Requirements:

Unassigned Emissions	
Emission Credits	
Compliance Schedule	
Source Test [date(s)]	

COMS	
CEMS	
Ambient monitoring	

Reporting Requirements

Annual Report (due date)	2/15
Semi-Annual Report (due date)	
GHG Report (due date)	
Monthly Report (due date)	

Quarterly Report (due date)	
Excess Emissions Report	Y
Other Reports (due date)	

Air Programs

NSPS (list subparts)	
NESHAP (list subparts)	
Compliance Assurance Monitoring (CAM)	
Regional Haze (RH)	
40 CFR Part 68 Risk Management	
Cleaner Air Oregon (CAO)	Y
Synthetic Minor (SM)	Y
SM-80	
Title V	

Major FHAP Source	
Federal Major Source	
TACT	
Type A State New Source Review	
Type B State New Source Review	
Prevention of Significant Deterioration (PSD)	
Nonattainment New Source Review (NNSR)	

Permittee Identification

1. A&K Development Company/Pacific Metal Fab LLC ("the facility" or "A&K") are a joint operation that manufactures husking equipment at 135 East 1st Avenue in Junction City, Oregon. The facility began operation at the current location in 2024. A&K Development previously operated from 1978 – 2024 at 410 Chambers Street in Eugene, Oregon (permit number 200042).
2. The facility operates under the primary Standard Industrial Classification (SIC) code of 3556 – Food Products Machinery, and the primary North American Industry Classification System (NAICS) code of 333241 – Food Product Machinery Manufacturing.

General Background Information

3. The facility operations include metal coating, metal prepping, manual and robotic welding, cutting, rubber forming and extrusion, powder coating, and final assembly. All operations are conducted inside buildings. All coating operations are conducted in two (2) paint booths (EU-1). The paint booths are equipped with dry filters to control particulate matter emissions from paint overspray. The facility typically operates one shift per day (approximately 2080 hours per year).

Reasons for Permit Action and Fee Basis

4. The proposed permit is a new Simple Air Contaminant Discharge Permit (ACDP) for a new facility. The facility submitted an initial application on July 19, 2024. The new Simple ACDP will be valid for up to ten (10) years.

Attainment Status

5. The facility is located in an area that has been designated as attainment or unclassified for all criteria pollutants. The facility is outside the Eugene-Springfield UGB as defined in LRAPA 29-0010 which designates the Eugene-Springfield CO and PM₁₀ maintenance areas. The facility is also located outside the Eugene-Springfield UGB as described in the current Eugene-Springfield Metropolitan Area General Plan, as amended. The facility is located within 100 kilometers of three (3) Class I air quality protection areas: Diamond Peak Wilderness, Mount Washington Wilderness and Three Sisters Wilderness area.

Permitting History

6. This is a new permit for a new source. A&K Development previously operated from 1978 – 2024 at 410 Chambers Street in Eugene, Oregon (permit number 200042).

Emission Unit Descriptions

7. The emission units (EUs) regulated by this permit are the following:

EU ID	Emission Unit Description	Pollution Control Device Description (PCD ID)	Installed / Last Modified
EU-1	Two (2) Paint Booths (A and B)	Dry Filter (DF)	2024
EU-2	Dip Line	Charcoal Bed Filter (CBF)	2024
EU-3	Welding (GMAW – gas metal arc welding)	None	2024
EU-4	Metal Cutting (plasma and fiber	Six (6) Baghouses (BHs	2024

EU ID	Emission Unit Description	Pollution Control Device Description (PCD ID)	Installed / Last Modified
	laser)	1-6)	
EU-5	Rubber Forming/Extrusion	None	2024
EU-6	Powder Coat Oven (natural gas-fired)	Dust Collector (DC) for powder coating, none for oven	2024
Categorically Insignificant Activities			
CIA-1	Emergency Generator	None	<2024

Significant Emission Units

8. EU-1 Paint Booths: The facility operates two (2) spray booths. Booth A is used to apply Thixon OSN-2-EF which is a general purpose one-coat adhesive used for bonding various elastomers to metals. Booth B is used for painting and priming. Xylene and toluene are solvents used in the process. The particulate matter emissions from paint overspray are controlled by dry filters. The dry filters achieve at least a 98% reduction in particulate matter emissions from the paint booth. Potential VOC and HAP emissions are based on requested limits in the Cleaner Air Oregon (CAO) Level 3 Risk Assessment. The total particulate matter emissions from the facility were determined to be de minimis on a potential-to-emit basis.
9. EU-2 Dip Line: The facility operates a dip line used for scale removal. The facility uses metal conditioning and rust prevention solutions in this emissions unit. A charcoal bed filter (CBF) is used to control emissions from this process but is not used in the emission calculations as a control device for removal efficiency. Potential VOC and HAP emissions are based on requested limits in the Cleaner Air Oregon (CAO) Level 3 Risk Assessment.
10. EU-3 Welding: The facility conducts gas metal arc welding (GMAW) welding operations. Welding emission factors are derived from San Diego Air Pollution Control District Welding Emission Factor Tables and are based on the worst case for each pollutant. Potential particulate matter emissions and HAP/TAC emissions are based on requested limits in the Cleaner Air Oregon (CAO) Level 3 Risk Assessment. The total particulate matter emissions from the facility were determined to be de minimis on a potential-to-emission basis.
11. EU-4 Metal Cutting: The facility conducts metal cutting using five (5) fiber lasers and one (1) plasma cutter. Cutting operations are controlled by in-line baghouses that exhaust inside a building. The facility cuts mild steel, aluminum, and stainless steel. Potential VOC and HAP emissions are based on requested limits in the Cleaner Air Oregon (CAO) Level 3 Risk Assessment.
 - BH-1 is a Donaldson Torit smoke and dust collector controlling fiber laser cutting
 - BH-2 is a Donaldson Torit smoke and dust collector controlling fiber laser cutting
 - BH-3 is a Donaldson Torit smoke and dust collector controlling fiber laser cutting
 - BH-4 is a Siadaros EcoAmbient smoke and dust collector controlling fiber laser cutting
 - BH-5 is a Siadaros EcoAmbient smoke and dust collector controlling fiber laser cutting
 - BH-6 is a Kinetic smoke and dust collector controlling plasma cutting
12. EU-5 Rubber Forming/Extrusion: The facility operates a styrene-butadiene (SBR) forming process used in the facility's products. Potential emissions are based on EPA AP-42, Section 4.12 based on the highest value between Compound #4 and Compound #6 and requested limits in the Cleaner Air Oregon (CAO) Level 3 Risk Assessment.

13. EU-6 Powder Coat Oven: The facility operates one (1) natural gas-fired powder coating oven. The make-up air unit is rated at 3.0 MMBtu/hr. Emissions are based on an assumed 8,760 hours of operation per year. Emissions from powder coating are controlled by a dust collector but have not been quantified. Any particulate matter emissions are controlled by a powder reclaim operation or high efficiency filters vented internally to the facility. In addition, this emission unit is centrally located in the facility without any obvious egress to the atmosphere. However, natural gas combustion is vented and has been quantified.

Categorically Insignificant Activity

14. CIA-1: The facility includes a 24 kW natural gas-fired emergency generator that is considered a categorically insignificant activity under LRAPA title 12.

Nuisance, Deposition and Other Emission Limitations

15. Under LRAPA 49-010(1), the permittee must not cause or allow air contaminants from any source subject to regulation by LRAPA to cause a nuisance. Compliance is demonstrated through documentation of all complaints received by the facility from the general public and following procedures to notify LRAPA of receipt of these complaints.
16. Under LRAPA 32-055, the permittee must not cause or permit the emission of particulate matter which is larger than 250 microns in size at sufficient duration or quantity as to create an observable deposition upon the real property of another person. Compliance is demonstrated through documentation of all complaints received by the facility from the general public and following procedures to notify LRAPA of receipt of these complaints.
17. Under LRAPA 32-090(1), the permittee must not discharge from any source whatsoever such quantities of air contaminants which cause injury or damage to any persons, the public, business or property; such determination is to be made by LRAPA. Compliance is demonstrated through documentation of all complaints received by the facility from the general public and following procedures to notify LRAPA of receipt of these complaints.

Emission Limitations

18. The facility is paved but the permit includes the general requirements for fugitive emissions under LRAPA 48-015 to provide a reasonable assurance that visible emissions will not cross the facility boundaries.
19. The facility is subject to the visible emission limitations under LRAPA 32-010(3). For sources, other than wood-fired boilers, no person may emit or allow to be emitted any visible emissions that equal or exceed an average of 20 percent opacity. Compliance is demonstrated through a plant survey of visible emissions using EPA Method 22 to be completed at least once a quarter. The permittee is required to take corrective action if any visible emissions are identified and contact LRAPA or conduct an EPA Method 9 test if the visible emissions cannot be eliminated.
20. The non-fuel burning equipment at this source that emits particulate matter is subject to the following particulate matter emission limitations under LRAPA 32-015(2)(b)(B): For sources installed, constructed, or modified on or after June 1, 1970 but prior to April 16, 2015 for which there are no representative compliance source test results, the particulate matter emission limit is 0.14 grains per dry standard cubic foot. Compliance is demonstrated through a plant survey of visible emissions using EPA Method 22 to be completed at least once a quarter. The permittee is

required to take corrective action if any visible emissions are identified, contact LRAPA or conduct an EPA Method 9 test if the visible emissions cannot be eliminated.

21. Each emissions unit at the facility is subject to the process weight rate emission limitations under LRAPA 32-045(1). No person may cause, suffer, allow, or permit the emissions of particulate matter in any one (1) hour from any process in excess of the amount shown in LRAPA 32-8010, for the process weight rate allocated to such process. Process weight is the total weight of all materials introduced into a piece of process equipment. Liquid and gaseous fuels and combustion air are not included in the total weight of all materials. Compliance is demonstrated through a plant survey of visible emissions using EPA Method 22 to be completed at least once a quarter. The permittee is required to take corrective action if any visible emissions are identified, contact LRAPA or conduct an EPA Method 9 test if the visible emissions cannot be eliminated.
22. The spray booth operations and particulate matter emissions control equipment at the facility must be operated and maintained at the highest and best practicable treatment and control of air contaminant emissions so as to maintain overall air quality at the highest possible levels, and to maintain contaminant concentrations, visibility reduction, odors, soiling, and other deleterious factors at the lowest possible levels under LRAPA 32-005(1). Compliance for the control equipment at the facility will be demonstrated through implementation of an Operation & Maintenance Plan. For the spray booth operations at the facility, the permittee will be required to (a) use dry filters achieving at least 98% captures of overspray particulate matter emissions, (b) use high transfer efficiency spray guns (i.e.: high volume, low pressure (HVLP), airless, or air-assisted airless (AAA) spray gun technology), (c) clean spray guns in an approved manner, (d) only allow trained personnel to spray apply coatings, and (e) keep VOC-containing materials closed when not in use.

Typically Achievable Control Technology (TACT)

23. LRAPA 32-008(2) requires new units installed or existing emissions units modified on or after January 1, 1994, meet TACT if the emissions unit meets the following criteria: The emissions unit is not subject to Major NSR in title 38, Type A State NSR in LRAPA title 38, an applicable Standard of Performance for New Stationary Sources in title 46, or any other standard applicable only to new or modified sources in title 32, title 33, or title 39 for the regulated pollutant emitted; the source is required to have a permit; if new, the emissions unit has emissions of any criteria pollutant equal to or greater than one (1) ton per year of any criteria pollutant; if modified, the emissions unit would have an increase in emissions of any criteria pollutant equal to or greater than one (1) ton per year of any criteria pollutant; and LRAPA determines that the proposed air pollution control devices and emission reduction processes do not represent TACT.
 - 23.a. The particulate matter emissions from the facility are de minimis. As such, TACT does not apply for particulate matter emissions.
 - 23.b. The following emission units are subject to TACT because they have potential emissions of criteria pollutants equal to or greater than one (1) ton per year:
 - i. EU-1 Paint Booth for VOCs. While a formal TACT determination has not been conducted, LRAPA has determined that the use of high volume, low pressure (HVLP), airless, or air-assisted airless (AAA) spray gun technology likely meets the TACT requirements for this emission unit.
 - ii. EU-4 Metal Cutting for NO_x. While a formal TACT determination has not been conducted, LRAPA has determined that there are no TACT requirements for this emission unit for NO_x.
 - iii. EU-6 Powder Coat Oven for CO and NO_x. While a formal TACT determination has not been conducted, LRAPA has determined that the use of good combustion practices likely meets the TACT requirements for this emission unit.

New Source Performance Standards (NSPSs)

24. There are no emission units at this facility for which NSPS have been promulgated or are applicable.

National Emission Standards for Hazardous Air Pollutants (NESHAPs)

25. There are no emission units at this facility for which NESHAPs are applicable. LRAPA reviewed the following NESHAPs to determine their applicability to this facility:
- 25.a. 40 CFR part 63 subpart MMMM – National Emission Standards for Hazardous Air Pollutants for Surface Coating of miscellaneous Metal Parts and Products is not applicable to the facility because the facility is not a major source of HAPs.
 - 25.b. 40 CFR part 63 subpart HHHHHH – National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources is not applicable to the facility because the facility does not use methylene chloride for paint stripping, it is not an autobody refinishing operation, and the surface coatings used at the facility do not contain the following target federal HAPs: cadmium, chromium, manganese, nickel, or lead. The facility submitted a Petition for Exemption from this regulation to LRAPA on December 19, 2013.
 - 25.c. 40 CFR part 63 subpart XXXXXX – National Emission Standards for Hazardous Air Pollutants: Nine Metal Fabrication and Finishing Source Categories is not applicable because the facility is not classified in one of the nine major industrial groups subject to this rule.

Plant Site Emission Limits (PSELs)

26. Provided below is a summary of the baseline emissions rate, netting basis, and PSELs for this facility.

Pollutant	Baseline Emission Rate (TPY)	Netting Basis		Plant Site Emission Limit (PSEL)		PTE (TPY)	Significant Emission Rate (TPY)
		Previous (TPY)	Proposed (TPY)	Previous PSEL (TPY)	Proposed PSEL (TPY)		
PM	NA	0	0	NA	de minimis	NA	25
PM ₁₀	NA	0	0	NA	de minimis	NA	15
PM _{2.5}	NA	0	0	NA	de minimis	NA	10
CO	NA	0	0	NA	1.1	1.1	100
NO _x	NA	0	0	NA	2.2	2.2	40
SO ₂	NA	0	0	NA	de minimis	NA	40
VOC	NA	0	0	NA	22	22	40
GHG	NA	0	0	NA	de minimis	NA	75,000
Individual HAP	NA	NA	NA	NA	9	9	NA
Aggregate HAPs	NA	NA	NA	NA	24	24	NA

- 26.a. The facility does not have a baseline emission rate for PM, PM₁₀, CO, NO_x, SO₂ or VOC because the facility was not in operation during either the 1977 or 1978 baseline year. A

- baseline emission rate is not established for PM_{2.5} in accordance with LRAPA 42-0048(3). The facility has no baseline for GHGs because the facility was not in operation during the baseline years 2000 through 2010.
- 26.b. The netting basis for all pollutants is 0 (zero) in accordance with LRAPA 42-0046(4).
 - 26.c. In accordance with LRAPA 42-0041(2), the PSELs for VOC, NO_x and CO are set equal to the source's potential to emit. No PSELs are set for PM, PM₁₀, PM_{2.5}, SO₂ and GHGs in accordance with LRAPA 42-0020(3)(a) because these pollutants are emitted below the de minimis as defined in LRAPA title 12.
 - 26.d. The baseline year, netting basis, and SER are not applicable for limiting federal HAPs. The facility has a potential-to-emit for federal HAPs that will exceed the major source thresholds for individual federal HAPs and aggregate federal HAPs of ten (10) TPY and 25 TPY, respectively. As such, the PSELs for individual federal HAPs and aggregate federal HAPs of nine (9) TPY and 24 TPY, respectively, have been added to the permit.

Unassigned Emissions and Emission Reduction Credits

- 27. The facility has zero (0) unassigned emissions. Unassigned emissions are equal to the netting basis minus the source's current PTE, minus any banked emission reduction credits. The facility has zero (0) tons of emission reduction credits.

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

- 28. This source is located in an area that is designated attainment or unclassified for all regulated pollutants. The proposed PSELs are less than the federal major source threshold for non-listed sources of 250 TPY per regulated pollutant and are not subject to Major NSR.

Federal Hazardous Air Pollutants/Toxic Air Contaminants

- 29. Potential annual federal hazardous air pollutant emissions (HAP) are based on the potential to emit of the facility operating under permit limitations. The potential emissions of federal HAPs are above the major source thresholds of ten (10) TPY of any single federal HAP and 25 TPY for the aggregate of federal HAPs. The maximum potential emission of a single federal HAP is 11.8 tons per year (Xylenes). The potential aggregate of federal HAP emissions is 28.9 tons per year. The facility is considered a synthetic minor source of federal HAPs.
- 30. Provided below is a summary of the potential emissions of federal HAPs and CAO TACs from this facility, excluding emissions from categorically insignificant activities.

Pollutant	CAS/DEQ Number	Potential Emissions (TPY)	Federal HAP	CAO Air Toxic
Organics				
1,2,4-Trimethylbenzene	95-63-6	8.84E-01	N	Y
1,3,5-Trimethylbenzene	108-67-8	3.53E-01	N	Y
1,1,2,2-Tetrachloroethane	79-34-5	4.5E-07	Y	Y
1,1,1-Trichloroethane	71-55-6	2.0E-05	Y	Y
1,1,2-Trichloroethane	79-00-5	2.7E-07	Y	Y
1,3-Butadiene	106-99-0	1.2E-04	Y	Y
1,4-Dichlorobenzene	106-46-7	1.8E-06	Y	Y
1,2-Dichloropropane	78-87-5	2.3E-07	Y	Y

Pollutant	CAS/DEQ Number	Potential Emissions (TPY)	Federal HAP	CAO Air Toxic
1,3-Dichloropropene	542-75-6	2.3E-07	Y	Y
2-Aminoethanol	141-43-5	3.7E-02	N	N
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.8E+00	N	Y
4-Methyl-2-Pentanone (Methyl iso-Butyl Ketone)	108-10-1	7.7E+00	Y	Y
Acetaldehyde	75-07-0	1.0E-04	Y	Y
Acetonitrile	75-05-8	4.7E-05	Y	Y
Acetophenone	98-86-2	7.2E-04	Y	Y
Acrolein	107-02-8	1.5E-04	Y	Y
Aniline	62-53-3	1.1E-04	Y	Y
Benzene	71-43-2	1.9E-04	Y	Y
t-Butyl Acetate	540-88-5	4.0E-01	N	Y
Biphenyl	92-52-4	3.6E-06	Y	Y
bis(2-Ethylhexyl)phthalate	117-81-7	4.2E-05	Y	Y
Butyl Benzyl Phthalate	85-68-7	4.0E-01	N	Y
Carbon Disulfide	75-15-0	5.7E-05	Y	Y
Carbon Tetrachloride	56-23-5	3.1E-07	Y	Y
Chloroform	67-66-3	2.4E-07	Y	Y
Chloromethane	74-87-3	1.5E-05	Y	Y
Cumene	98-82-8	1.2E-01	Y	Y
Di-n-butylphthalate	84-74-2	4.3E-05	Y	Y
Dibenzofuran	132-64-9	7.6E-07	Y	Y
Dimethylphthalate	131-11-3	9.2E-07	Y	Y
Ethyl Benzene	100-41-4	2.7E+00	Y	Y
Ethylene Dibromide	106-93-4	3.8E-07	Y	Y
Ethylene Dichloride	107-06-2	2.0E-07	Y	Y
Formaldehyde	50-00-0	5.8E-04	Y	Y
Hexane	110-54-3	1.7E-04	Y	Y
Hexachloropentadiene	77-47-4	5.9E-02	Y	Y
Isooctane	540-84-1	9.7E-06	Y	Y
Isophorone	78-59-1	7.6E-06	Y	Y
Methanol	67-56-1	5.4E-05	Y	Y
Methyl iso-Butyl Ketone	108-10-1	7.7E+00	Y	Y
Methyl Methacrylate	80-62-6	4.0E-02	Y	Y
Methylene Chloride	75-09-2	2.8E-03	Y	Y
N,N-Dimethylaniline	121-69-7	1.2E-06	Y	Y
Naphthalene	91-20-3	4.8E-05	Y	Y
o-Toluidine	95-53-4	3.2E-05	Y	Y
Phenol	108-95-2	6.7E-05	Y	Y
POM (including PAHs)	--	1.3E-06	Y	Y
Propylene Oxide	75-56-9	3.8E-04	Y	Y
Styrene	100-42-5	1.6E-04	Y	Y
Tetrachloroethene	127-18-4	1.1E-05	Y	Y

Pollutant	CAS/DEQ Number	Potential Emissions (TPY)	Federal HAP	CAO Air Toxic
Toluene	108-88-3	6.2E+00	Y	Y
Vinyl Chloride	75-01-4	1.3E-07	Y	Y
Xylenes (total)	1330-20-7	1.2E+01	Y	Y
Inorganic Gases				
Ammonia	7664-41-7	4.10E-02	N	Y
Sulfuric Acid	7664-93-9	8.17E-01	N	Y
Metals				
Aluminum	7429-90-5	2.2E-01	N	Y
Arsenic compounds	7440-38-2	2.6E-06	Y	Y
Barium compounds	7440-39-3	5.6E-05	N	Y
Beryllium compounds	7440-41-7	1.5E-07	Y	Y
Cadmium compounds	7440-43-9	1.4E-05	Y	Y
Chromium (Total)	7440-47-3	4.6E-02	Y	Y
Chromium (VI)	18540-29-9	5.0E-04	Y	Y
Cobalt compounds	7440-48-4	1.1E-05	Y	Y
Copper	7440-50-8	3.4E-05	N	Y
Iron	7439-89-6	3.6E-01	N	Y
Lead	7439-92-1	6.4E-06	Y	Y
Manganese compounds	7439-96-5	5.2E-02	Y	Y
Mercury compounds	7439-97-6	3.3E-06	Y	Y
Molybdenum Trioxide	1313-27-5	2.1E-05	N	Y
Nickel compounds	365	9.5E-03	Y	Y
Phosphorus	7723-43-0	6.5E-06	Y	Y
Selenium compounds	7782-49-2	3.5E-01	Y	Y
Vanadium (fume or dust)	7440-62-2	2.9E-05	N	Y
Zinc oxide	1314-13-2	8.8E-01	N	Y
Zinc compounds	7440-66-6	3.7E-04	N	Y
Total (TPY) =			28.9	35

Cleaner Air Oregon

31. Under the Cleaner Air Oregon program, only existing sources that have been notified by LRAPA and new sources are required to perform risk assessments. Clean Air Oregon requires reporting on the emissions of approximately 600 Toxic Air Contaminants (TAC) and regulates approximately 260 TACs that have Risk Based Concentrations established in rule. All FHAPs are on the list of approximately 600 TACs.

As a new source, A&K was required to perform a risk assessment of their TAC emissions. LRAPA approved the facility's Risk Assessment report on May 21, 2026. A&K conducted a Level 3 Risk Assessment to determine cancer and noncancer risk from TAC emissions. Based on the results of the Level 3 Risk Assessment summarized below, A&K exceeds the Source Permit Level, and Community Engagement Level for Cancer, Non-cancer and Acute Risks and is required to have source risk limits. Based on the results of the Level 3 Risk Assessment summarized below, the facility is at but not above the TLAER Level.

The primary Cancer Risk and Acute Risk driver is emissions from welding fumes EU-3 Welding. The primary Non-Cancer Risk driver is emissions from dip line emissions from EU-2 Dip Line. The proposed permit will contain both daily and annual (12-month rolling) production limitations based on the conditions assumed in A&K's Risk Assessment.

Facility Risk from Toxic Air Contaminants

Risk Type	Exposure	Calculated Risk	Rounded Risk	Source Permit Level	Community Engagement Level
Cancer Risk – added cancer risk per million with 70 years of exposure					
	Residential	10.167	10	0.5	5
	Child	0.186		0.5	
	Worker	1.741		0.5	
Non-Cancer Risk – Hazard Index (less than or equal to 1 is considered safe)					
	Residential	0.774	1	0.5	1
	Child	0.057		0.5	
	Worker	0.590		0.5	
Acute Risk		1.39	1	0.5	1

Acute Risk Adjusted by Target Organ

Risk Type	Target Organ	Calculated Risk	Rounded Risk	Source Permit Level	Community Engagement Level
Acute Risk					
	Developmental	1.47	1	0.5	1
	Nervous	1.39	1	0.5	1

Toxics Release Inventory

32. The Toxics Release Inventory (TRI) is a federal program that tracks the management of certain toxic chemicals that may pose a threat to human health and the environment, over which LRAPA has no regulatory authority. It is a resource for learning about toxic chemical releases and pollution prevention activities reported by certain industrial facilities. Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) created the TRI program. In general, chemicals covered by the TRI program are those that cause:

- Cancer or other chronic human health effects;
- Significant adverse acute human health effects; or
- Significant adverse environmental effects.

There are currently over 650 chemicals covered by the TRI program. Facilities that manufacture, process or otherwise use these chemicals in amounts above established levels must submit annual TRI reports on each chemical. NOTE: The TRI program is a federal program over which LRAPA has no regulatory authority. LRAPA does not guarantee the accuracy of any information copied from EPA's TRI website.

In order to report emissions to the TRI program, a facility must operate under a reportable NAICS code, meet a minimum employee threshold, and manufacture, process, or otherwise use chemicals in excess of the applicable reporting threshold for the chemical. This facility has not reported any emissions to the TRI program because they do not manufacture, process, or otherwise use chemicals in excess of the applicable reporting thresholds.

Compliance History

33. This facility has not been inspected by LRAPA since the facility was constructed in 2024.
34. LRAPA issued a Notice of Civil Penalty (NCP) 24-3903 to the facility on May 20, 2024 for failure to notify LRAPA prior to the construction of a new stationary source and failure to comply with the Cleaner Air Oregon rules under OAR 340-245-0005 through 340-245-8050. A total civil penalty amount of \$6,800 was imposed for the violations. The facility requested and LRAPA approved a reduction of the civil penalty amount to \$4,200. The facility paid the penalty on August 4, 2025 and the action was closed.

Source Testing History

35. The facility is not required to conduct source testing at this time. LRAPA is not aware of any historical source testing conducted at this facility.

Recordkeeping Requirements

36. The facility is required to keep and maintain a record of the following information for a period of at least five (5) years.

Activity	Parameter	Units	Minimum Recording Frequency
PSEL Recordkeeping			
VOC-containing coatings and solvents	Material name and usage	Gallons	Monthly
VOC-containing coatings and solvents	VOC content	lb/gallon	Each coating and solvent
Metal cutting	Hours of operation by cutting technique and metal type	Hours	Monthly
Rubber usage	Usage	Pounds	Monthly
Natural gas for Powder Coat Oven	Usage	MMcf	Monthly
General Recordkeeping			
Welding wire/rod	Usage	Pounds	Annually
Spray booth filter particulate matter control efficiency	Control efficiency	%	Maintain documentation from each filter manufacturer
Log of nuisance complaints	NA	NA	Upon receipt of complaint
Visible Emission Survey	Opacity	Observation times and dates	Quarterly
Operation and Maintenance Plan	NA	NA	Maintain the current version on-site
Upset Log of all planned and unplanned excess emissions, as required by Condition G16	NA	NA	Per occurrence
Cleaner Air Oregon			

Activity	Parameter	Units	Minimum Recording Frequency
Records required by Cleaner Air Oregon under Conditions 18, 20, 22, and 24	See Conditions 18, 20, 22, and 24	See Conditions 18, 20, 22, and 24	See Conditions 18, 20, 22, and 24

Reporting Requirements

37. The facility must submit to LRAPA the following reports by no later than the dates indicated in the table below:

Report	Reporting Period	Due Date
PSEL pollutant emissions as calculated according to Condition 5 including supporting calculations.	Annual	February 15
Metal cutting – hours of operation by cutting technique and metal type	Annual	February 15
Rubber forming – rubber usage	Annual	February 15
Welding wire/rod usage	Annual	February 15
Powder coat oven natural gas usage	Annual	February 15
Cleaner Air Oregon Change in Zoning Report	Annual	February 15

38. The permittee is not subject to greenhouse gas reporting under OAR 340 Division 215 because actual greenhouse gas emissions are less than 2,500 metric tons (2,756 short tons) of CO₂ equivalents per year. If the source ever emits more than this amount, they will be required to report greenhouse gas emissions.

Public Notice

39. Pursuant to paragraph 37-0064(5)(a), issuance of a renewed Simple Air Contaminant Discharge Permit requires a Category III public notice according to title 31. In accordance with paragraph 31-0033(3)(c), LRAPA will provide public notice of the proposed permit action and a minimum of 35 days for interested persons to submit written comments.

The proposed permit will be on public notice from August 28, 2026 to October 1, 2026. Written comments may be submitted during this public comment period. If requested by ten (10) or more individuals or an individual representing a group of more than ten (10) individuals, LRAPA will schedule a public hearing on the proposed permit action. LRAPA will provide a minimum of 30 days notice for a public hearing. After the comment period and hearing (if requested), LRAPA will respond to comments received and then take final action to issue or deny the permit.

Emission Detail Sheets:

Facility Emission Summary									
EU ID	Emission Unit Description	PM (TPY)	PM ₁₀ (TPY)	PM _{2.5} (TPY)	SO ₂ (TPY)	NO _x (TPY)	CO (TPY)	VOC (TPY)	GHG (TPY)
EU-1	Paint Booth	0.07	0.07	0.07	--	--	--	22.1	--
EU-2	Metal Cutting	0.58	0.58	0.58	--	0.94	--	--	--
EU-3	Welding	0.06	0.06	0.06	--	--	--	--	--
EU-4	Dip Line	--	--	--	--	--	--	3.7E-02	--
EU-5	Rubber Line	6.7E-06	6.7E-06	6.7E-06	--	--	--	2.7E-03	--
EU-6	Powder Coat Oven	3.2E-02	3.2E-02	3.2E-02	2.2E-02	1.28	1.08	7.0E-02	1,539
		PSEL =	de minimis	de minimis	de minimis	2.2	1.1	22	de minimis
CIA-1	NG Emergency Generator	1.7E-04	1.7E-04	1.7E-04	1.0E-05	4.9E-02	6.9E-03	2.0E-03	2

[illegible]

Wet Paint Booth HAPs/TACs

Toxic Air Contaminants																																		
Hazardous Air Pollutants																																		
HAP/TAC Emissions		Acetone (67-64-1)		t-Butyl Acetate (540-88-5)		Butyl Benzyl Phthalate (85-68-7)		Methyl Ethyl Ketone (78-93-3)		1,3-Dimethylbenzene (106-47-8)		1,2-Dimethylbenzene (95-63-6)		Zinc Oxide (1314-13-2)		Cumene (95-82-8)		Ethyl Benzene (100-41-4)		Methyl Isobutyl Ketone (108-10-1)		Methyl Methacrylate (96-04-4)		Tetrachloroethylene (127-18-4)		Toluene (108-88-3)		Xylenes (1330-20-7)		Selenium and compounds (7782-49-0)		Hexachlorocyclopentadiene (74-84-0)		
Product	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb
Thron QSN-2-EP																																		
Forest Paint: Xylene	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Forest Paint: Toluene	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1st Paint	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1st Primer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2nd Paint	10.0%	741	10.0%	741	10.0%	741	10.0%	741	10.0%	741	10.0%	741	10.0%	741	10.0%	741	10.0%	741	10.0%	741	10.0%	741	10.0%	741	10.0%	741	10.0%	741	10.0%	741	10.0%	741	10.0%	741
PTE (lbs/yr)	741	PTE (lbs/yr)	741	PTE (lbs/yr)	741	PTE (lbs/yr)	741	PTE (lbs/yr)	741	PTE (lbs/yr)	741	PTE (lbs/yr)	741	PTE (lbs/yr)	741	PTE (lbs/yr)	741	PTE (lbs/yr)	741	PTE (lbs/yr)	741	PTE (lbs/yr)	741	PTE (lbs/yr)	741	PTE (lbs/yr)	741	PTE (lbs/yr)	741	PTE (lbs/yr)	741	PTE (lbs/yr)	741	PTE (lbs/yr)
PTE (TPY) =	0.37	PTE (TPY) =	0.37	PTE (TPY) =	0.37	PTE (TPY) =	0.37	PTE (TPY) =	0.37	PTE (TPY) =	0.37	PTE (TPY) =	0.37	PTE (TPY) =	0.37	PTE (TPY) =	0.37	PTE (TPY) =	0.37	PTE (TPY) =	0.37	PTE (TPY) =	0.37	PTE (TPY) =	0.37	PTE (TPY) =	0.37	PTE (TPY) =	0.37	PTE (TPY) =	0.37	PTE (TPY) =	0.37	PTE (TPY) =
11.8 = PTE Maximum Individual HAP Emissions (TPY)																	28.7 = PTE Total HAP Emissions (TPY)																	
Note: Solids content is assumed to be [1 - %VOC content] * %Water/Exempt Solvent%. Transfer efficiency based on use of high efficiency transfer spray guns. Actual dry filter particulate removal efficiency is higher than 98.0%. Acetone and t-Butyl Acetate are not considered VOC under the definition in Title 12. PTE values less than 1.0 are from the CAL040000 form.																																		

Dip Line Emissions

VOC Emissions

Product	Potential Usage Less Waste (gal/yr)	Product Density (lb/gal)	VOC Content (%)	Potential Emissions VOC (lb/yr)	PTE VOC (lbs/yr)	CAO Potential Usage Less Waste (gal/day)
Metal Conditioner LSR SJ	383	10.68	0.00%	0	0	5.3
Rust Prevent SYN 3-X	383	9.67	2.01%	74.5	74	5.4
Total gal/yr =	766		Total lbs/yr =	74.5	74	
			Total TPY =	3.7E-02	3.7E-02	

Toxic Air Contaminants

HAP/TAC Emissions

Product	2-Aminoethanol (141-43-5)		Sulfuric Acid (7664-93-9)	
	% by wt.	lb	% by wt.	lb
Metal Conditioner LSR SJ	0.00%	0	40.00%	1634
Rust Prevent SYN 3-X	2.01%	74.5	0.00%	0.0
	PTE (lbs/yr)=	74	PTE (lbs/yr)=	1,634
	PTE (TPY) =	3.7E-02	PTE (TPY) =	0.82

Note:

Usage provided by A&K/PMF.

Process is controlled by a charcoal filter bed. Control efficiency not accounted for in the calculations.

Potential Usages from the CAO AQ520 Form

Welding Emissions													
12.0	= Max Usage (1000 lb wire/yr)												
Criteria Pollutants			Welding Wire/Rod Emission Factors										
Pollutant	PTE (TPY)		Process	Type	Emission Factors (lb/10 ³ lb)								
					Fume	Cobalt	Copper	Chromium (total)	Chromium (VI)	Lead	Manganese	Nickel	Phosphorus
PM/PM10/PM2.5	0.06		GMAW	E308	5.4	0.001	ND	7.72	0.0284	ND	0.346	0.184	ND
			GMAW	E309	10	ND	0.00382	7.61	0.0801	ND	0.0874	0.743	0.00109
			GMAW	E70S	5.2	0.001	ND	0.0801	0.0041	ND	0.318	0.001	ND
			GMAW	L56	10	ND	ND	ND	ND	0.273	ND	ND	
HAP/TAC Emissions			Max EF =	10	0.001	0.00382	7.72	0.0801	0	0.346	0.743	0.00109	
Pollutant	CAS/DEQ Number	PTE (TPY)											
Cobalt	7440-48-4	6.0E-06											
Copper	7440-50-8	2.3E-05											
Chromium (Total)	7440-47-3	4.6E-02											
Chromium (VI)	18540-29-9	4.8E-04											
Lead	7439-92-1	0.0E+00											
Manganese	7439-96-5	2.1E-03											
Nickel	7440-02-0	4.5E-03											
Phosphorus	7723-43-0	6.5E-06											
Notes:													
Emission factors derived from San Diego Air Pollution Control District Welding Emission Factor Tables (https://www.sdapcd.org/content/sdapcd/permits/toxics-emissions/calculation-procedures.html#v1-8bc7d4f576-item-20d5a8d99c-tab).													
Assumes highest emitting welding wire/rod for each regulated pollutant.													
ND (No Detect) is represented as zero.													
<' than the detection limit values represented as the detection limit.													
Lead is assumed to be from lead compounds.													
The NOx and CO emissions from welding are assumed to be negligible.													
EF = Emission Factor													
Max Usage is from the CAO AQ520 Form													

PM/PM ₁₀ /PM _{2.5} Emissions																	
Unit Identification	Cutting Technique	Metal Type	Metal Thickness (Inches)	Kerf (Inches)	Metal Cutting Speed (IPM)	Control Device Type	% Control Efficiency	Specific Gravity	Density Conversion (lb/in ³)	Fume Generated (% of Particulate Generated)	PM/PM _{2.5} /PM ₁₀ Emission Factor (lb/inch)	Metal Feed Rate (IPH)	Total Uncontrolled Emissions (lb/hr)	Total Uncontrolled Emissions (TPY)	Total PTE (lb/hr)	Total PTE (TPY)	Total PTE (lb/yr)
Fiber Laser	Dry	Mild Steel	0.1875	0.005	850	Baghouse	99%	7.83	0.28	5%	1.3E-05	51,000	3.38	9.85	3.4E-02	9.8E-02	197
Fiber Laser	Dry	Stainless	0.0625	0.005	2625	Baghouse	99%	7.7	0.28	7%	6.1E-06	157,500	4.79	0.70	4.8E-02	7.0E-03	14
Fiber Laser	Dry	Aluminum	0.0582	0.005	2952	Baghouse	99%	2.7	0.10	5%	1.5E-06	177,120	1.29	3.75	1.3E-02	3.8E-02	75
													Max Emissions (per unit) =		4.8E-02	9.8E-02	
Plasma Cutter	Dry	Mild Steel	0.1875	0.0625	850	Baghouse	99%	7.83	0.28	5%	1.7E-04	51,000	8.45	8.79	8.5E-02	8.8E-02	176
Plasma Cutter	Dry	Stainless	0.0625	0.0625	2625	Baghouse	99%	7.7	0.28	7%	7.6E-05	157,500	11.98	0.62	1.2E-01	6.2E-03	12
Plasma Cutter	Dry	Aluminum	0.0582	0.0625	2952	Baghouse	99%	2.7	0.10	5%	1.8E-05	177,120	3.22	3.35	3.2E-02	3.4E-02	67
													Max Emissions (per unit) =		1.2E-01	8.8E-02	
													Max Emissions (All Units) =		0.36	0.58	
HAP/TAC Emissions																	
NOx Emissions																	
Unit Identification	Metal Type	Pollutant	CAS/DEQ Number	Fume Percent	Total Uncontrolled Emissions (lb/hr)	Total Uncontrolled Emissions (TPY)	Total PTE (lb/hr)	Total PTE (TPY)	Total PTE (lb/yr)	Unit Identification	Cutting Technique	Metal Type	NOx Emission Factor (g/min)	Total PTE (lb/hr)	Total PTE (TPY)	Total PTE (lb/yr)	
Fiber Laser	Mild Steel	Copper	7440-50-8	1.4%	4.7E-02	1.4E-01	4.7E-04	1.4E-03	2.76	Plasma Cutter	Dry	Mild Steel	6.83	0.90	0.94	1880	
		Iron	7439-89-6	73.0%	2.5E+00	7.2E+00	2.5E-02	7.2E-02	143.75			Stainless	6.56	0.87	0.05	90	
		Manganese	7439-96-5	10%	3.4E-01	9.8E-01	3.4E-03	9.8E-03	19.69			Aluminum	6.83	0.90	0.94	1879	
Fiber Laser	Stainless	Chromium (IV)*	18540-29-9	0.0044%	2.1E-04	3.1E-05	2.1E-06	3.1E-07	0.000620	Plasma Cutter	Dry	Max Emissions (per unit) =		0.90	0.94		
		Iron	7439-89-6	25.4%	1.2E+00	1.8E-01	1.2E-02	1.8E-03	3.54			Max Emissions (All Units) =		0.90	0.94		
		Manganese	7439-96-5	4.4%	2.1E-01	3.1E-02	2.1E-03	3.1E-04	0.61								
		Nickel	7440-02-0	10.3%	4.9E-01	7.2E-02	4.9E-03	7.2E-04	1.44								
Fiber Laser	Aluminum	Aluminum	7429-90-5	100%	1.3E+00	3.8E+00	1.3E-02	3.8E-02	75.05								
					Max Aluminum (per unit) =		1.3E-02	3.8E-02									
					Max Chromium (IV) (per unit) =		2.1E-06	3.1E-07									
					Max Copper (all units) =		4.7E-04	1.4E-03									
					Max Iron (per unit) =		2.5E-02	7.2E-02									
					Max Manganese (per unit) =		3.4E-03	9.8E-03									
					Max Nickel (per unit) =		4.9E-03	7.2E-04									
Unit Identification	Metal Type	Pollutant	CAS/DEQ Number	Fume Percent	Total Uncontrolled Emissions (lb/hr)	Total Uncontrolled Emissions (TPY)	Total PTE (lb/hr)	Total PTE (TPY)	Total PTE (lb/yr)								
Plasma Cutter	Mild Steel	Copper	7440-50-8	1.4%	1.2E-01	1.2E-01	1.2E-03	1.2E-03	2.46								
		Iron	7439-89-6	73.0%	6.2E+00	6.4E+00	6.2E-02	6.4E-02	128.35								
		Manganese	7439-96-5	10%	8.5E-01	8.8E-01	8.5E-03	8.8E-03	17.58								
Plasma Cutter	Stainless	Chromium (IV)*	18540-29-9	0.0044%	5.3E-04	2.8E-05	5.3E-06	2.8E-07	0.000554								
		Iron	7439-89-6	25.4%	3.0E+00	1.6E-01	3.0E-02	1.6E-03	3.16								
		Manganese	7439-96-5	4.4%	5.3E-01	2.7E-02	5.3E-03	2.7E-04	0.55								
		Nickel	7440-02-0	10.3%	1.2E+00	6.4E-02	1.2E-02	6.4E-04	1.28								
Plasma Cutter	Aluminum	Aluminum	7429-90-5	100%	3.2E+00	3.4E+00	3.2E-02	3.4E-02	67.00								
					Max Aluminum (per unit) =		3.2E-02	3.4E-02									
					Max Chromium (IV) (per unit) =		5.9E-05	5.9E-07									
					Max Iron (per unit) =		3.4E-01	3.4E-03									
					Max Manganese (per unit) =		5.8E-02	5.8E-04									
					Max Nickel (per unit) =		1.4E-01	1.4E-03									
					Max Copper (all units) =		2.6E-01	2.6E-03									
					Max Aluminum (all units) =		9.7E-02	2.2E-01									
					Max Chromium (IV) (all units) =		6.9E-05	2.1E-06									
					Max Iron (all units) =		4.6E-01	3.6E-01									
					Max Manganese (all units) =		7.5E-02	5.0E-02									
					Max Nickel (all units) =		1.6E-01	5.0E-03									
					Max Copper (all units) =		2.6E-01	9.5E-03									
Fume Generation Rate/Specific Gravity Table																	
Metal	Dry	Semidry	Wet	Specific Gravity													
Mild Steel, 8mm	5	0.5	0.05	7.83													
Stainless Steel, 8mm	7	0.7	0.07	7.7													
Stainless Steel, 35mm	1	0.1	0.01	7.7													
NOx Emission Rate Table																	
Metal	Dry (l/min)	Semidry (l/min)	Wet (l/min)														
Mild Steel, 8mm	4.95	2.75	1.05														
Stainless Steel, 8mm	4.75	2.45	1.15														
Stainless Steel, 35mm	7.4	3.9	1.95														
Notes:																	
Emissions are based on "Emission of Fume, Nitrogen Oxides and Noise in Plasma Cutting of Stainless and Mild Steel" by Bromsen B. et al. (1994), except for hexavalent chromium (see below)																	
*Default hexavalent chromium emissions from plasma and fiber laser cutting are based on South Coast AQMD's 2025 Plasma and Fiber Laser Cutting Guidelines using 0.00022 lb Cr+6 emitted per lb metal removed																	
https://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/guidelines-for-calculating-and-reporting-emissions-from-laser-or-plasma-cutting-of-metal-materials-operations---fixed.pdf?sfvrsn=6																	
These emission units do not use water and are considered "dry".																	
Fiber laser fume emissions are assumed to be similar to plasma fume emissions.																	
The calculations assume the use of air as the plasma gas. Oxygen as plasma gas lowers fume emissions by 25%. Nitrogen as plasma gas lowers NOx emissions by 20%.																	
NOx emissions assume NO ₂ is 7.5% of the total emissions of NOx (NO and NO ₂). Assumes NO has a density of 1.34 g/L and NO ₂ has a density of 1.88 g/L.																	
NOx emissions from aluminum are assumed to be similar to mild steel.																	
Due to the nature of fiber lasers, no significant NOx emissions are expected from these units.																	
Mild steel fume is 67-73% iron, 2-10% manganese, and ND-1.4% copper.																	
310 stainless steel fume is 25.4% iron, 4.4% manganese, 10.3% nickel, and 20.2% chromium(VI).																	
Aluminum fume is conservatively assumed to be 100% aluminum.																	
Worst case emissions of all pollutants based on the maximum emission factor from a given material.																	
Requested hours/year potentials are from the CAO AQ250 Form																	
Iron (CAS 7439-89-6) is neither a HAP or a TAC but has been kept since it was originally included when this spreadsheet was created																	

Notes:
Emission factor data are from EPA AP-42, Section 4.12, Extrude 30800112 based on the highest value between Compound #4 and Compound #6.
EF = Emission Factor
Maximum and Potential Usages from CAO AQ520 Form

Powder Coat Oven					
Makeup Air Unit Specifications					
Max Heat Input	3.0	MMBtu/hr			
Heat Value - Natural Gas	1,026	MMBtu/MMcf			
Hrs of Operation	8,760	hr/yr			
Criteria Pollutant Emissions					
Pollutant	Emission Factor	Emission Factor Units	Potential Emissions (TPY)		
PM	2.5	lb/MMcf	0.03		
PM10	2.5	lb/MMcf	0.03		
PM2.5	2.5	lb/MMcf	0.03		
Carbon Monoxide	84	lb/MMcf	1.08		
Nitrogen Oxides	100	lb/MMcf	1.28		
Sulfur Dioxide	1.7	lb/MMcf	0.02		
VOCs	5.5	lb/MMcf	0.07		
GHGs (CO ₂ equiv.)	117	lb/MMBtu	1,539		
HAP/TAC Emissions					
Pollutant	CAS/DEQ Number	Emission Factor (lb/MMcf)	Potential Emissions (TPY)	Federal HAP	CAO Air Toxic
Organics					
Acetaldehyde	75-07-0	4.30E-03	5.5E-05	Yes	Yes
Acrolein	107-02-8	2.70E-03	3.5E-05	Yes	Yes
Benzene	71-43-2	8.00E-03	1.0E-04	Yes	Yes
Ethyl Benzene	100-41-4	9.50E-03	1.2E-04	Yes	Yes
Formaldehyde	50-00-0	1.70E-02	2.2E-04	Yes	Yes
Hexane	110-54-3	6.30E-03	8.1E-05	Yes	Yes
Naphthalene	91-20-3	3.00E-04	3.8E-06	Yes	Yes
POM (inc. PAHs)	401	1.00E-04	1.3E-06	Yes	Yes
Toluene	108-88-3	3.66E-02	4.7E-04	Yes	Yes
Xylenes	1330-20-7	2.72E-02	3.5E-04	Yes	Yes
Inorganic Gases					
Ammonia	7664-41-7	3.2000	4.1E-02	No	Yes
Metals					
Arsenic and compounds	7440-38-2	2.0E-04	2.6E-06	Yes	Yes
Barium and compounds	7440-39-3	4.4E-03	5.6E-05	No	Yes
Beryllium and compounds	7440-41-7	1.2E-05	1.5E-07	Yes	Yes
Cadmium and compounds	7440-43-9	1.1E-03	1.4E-05	Yes	Yes
Chromium, Hexavalent	18640-29-9	1.4E-03	1.8E-05	Yes	Yes
Cobalt and compounds	7440-48-4	8.4E-05	1.1E-06	Yes	Yes
Copper and compounds	7440-50-8	8.5E-04	1.1E-05	No	Yes
Lead and compounds	7439-92-1	5.0E-04	6.4E-06	Yes	No
Manganese and compounds	7439-96-5	3.8E-04	4.9E-06	Yes	Yes
Mercury and compounds	7439-97-6	2.6E-04	3.3E-06	Yes	Yes
Molybdenum Trioxide	1313-27-5	1.7E-03	2.1E-05	No	Yes
Nickel compounds, insoluble	365	2.1E-03	2.7E-05	Yes	Yes
Selenium and compounds	7782-49-2	2.4E-05	3.1E-07	Yes	Yes
Vanadium (fume or dust)	7440-62-2	2.3E-03	2.9E-05	No	Yes
Zinc and compounds	7440-66-6	2.9E-02	3.7E-04	No	Yes
Total Emissions (TPY) =			4.3E-02	1.5E-03	4.3E-02
GHG-Related Emission Factors					
Pollutant	Natural Gas (kg/MMBtu)	GWP			
Carbon Dioxide (CO ₂)	53.06	1			
Methane (CH ₄)	1.0E-03	25			
Nitrous Oxide (N ₂ O)	1.0E-04	298			
Notes:					
Criteria pollutant emissions factors are based on DEQ Emission Factors Gas Fired Boilers, AQ-EF05 (08/01/2011).					
GHG emission factors are from 40 CFR 98, Tables C-1 and C-2.					
Toxic emission factors are based on DEQ Combustion Emission Factor Search Tool (2020).					
Particulate matter emissions are controlled by a Nordson high efficiency cartridge filter that exhausts into a building but were not quantified.					

Natural Gas Emergency Generator Emissions					
Inputs					
100 Maximum Hours per Year					
1,026 MMBtu/MMcf					
1,341 hp/kW					
8,490 Btu/hp-hr					
24 Max kW					
41.8 Max HP					
0.36 Max MMBtu/hr					
Criteria Pollutant Emissions					
Pollutant	Emission Factor	Emission Factor Units	Potential Emissions (TPY)		
PM	10	lb/MMcf	1.7E-04		
PM10	10	lb/MMcf	1.7E-04		
PM2.5	10	lb/MMcf	1.7E-04		
Carbon Monoxide	399	lb/MMcf	6.9E-03		
Nitrogen Oxides	2,840	lb/MMcf	4.9E-02		
Sulfur Dioxide	0.6	lb/MMcf	1.0E-05		
VOCs	116	lb/MMcf	2.0E-03		
GHGs (CO ₂ equiv.)	117	lb/MMBtu	2.1		
HAP/TAC Emissions					
Pollutant	CAS/DEQ Number	Emission Factor (lbs/MMCF)	PTE Emissions (TPY)	Federal HAP	CAO Air Toxic
Organics					
1,1,2,2-Tetrachloroethane	79-34-5	0.0258	4.5E-07	Yes	Yes
1,1,2-Trichloroethane	79-00-5	0.0156	2.7E-07	Yes	Yes
1,2-Dichloropropane	78-87-5	0.0133	2.3E-07	Yes	Yes
1,3-Dichloropropane	542-75-6	0.013	2.3E-07	Yes	Yes
Acetaldehyde	75-07-0	2.8500	4.9E-05	Yes	Yes
Acrolein	107-02-8	2.6800	4.6E-05	Yes	Yes
Benzene	71-43-2	1.6100	2.8E-05	Yes	Yes
1,3-Butadiene	106-99-0	0.6760	1.2E-05	Yes	Yes
Carbon Tetrachloride	56-23-5	0.0181	3.1E-07	Yes	Yes
Chloroform	67-66-3	0.0140	2.4E-07	Yes	Yes
Ethyl Benzene	100-41-4	0.0253	4.4E-07	Yes	Yes
Ethylene Dibromide	106-93-4	0.0217	3.8E-07	Yes	Yes
Ethylene Dichloride	107-06-2	0.0115	2.0E-07	Yes	Yes
Formaldehyde	50-00-0	20.9000	3.6E-04	Yes	Yes
Methanol	67-56-1	3.1200	5.4E-05	Yes	Yes
Methylene Chloride	75-09-2	0.0420	7.3E-07	Yes	Yes
Naphthalene	91-20-3	0.0990	1.7E-06	Yes	Yes
Styrene	100-42-5	0.0121	2.1E-07	Yes	Yes
Toluene	108-88-3	0.5690	9.8E-06	Yes	Yes
Vinyl Chloride	75-01-4	0.0073	1.3E-07	Yes	Yes
Xylenes	1330-20-7	0.1990	3.4E-06	Yes	Yes
Inorganic Gases					
Ammonia	7664-41-7	3.2000	5.5E-05	No	Yes
Total Emissions (TPY) =			6.3E-04	5.7E-04	6.3E-04
GHG-Related Emission Factors					
Pollutant	Natural Gas (kg/MMBtu)	GWP			
Carbon Dioxide (CO ₂)	53.06	1			
Methane (CH ₄)	1.0E-03	25			
Nitrous Oxide (N ₂ O)	1.0E-04	298			
Notes:					
Assumes a conversion factor of 8,490 Btu/hp-hr and an engine output HP efficiency loss factor of 1.3.					
For natural gas, the emission factors are from Oregon DEQ AQ-EF07 - Emission Factors - Power (Electric) Generators (08/01/2011).					
GHG emission factors are from 40 CFR 98, Tables C-1 and C-2.					
HAP/TAC emissions from 2020 ATEI Combustion Emission Factor Search Tool assuming rich burn NG engines.					
Fuel high heat values are from ODEQ Fuel Combustion Greenhouse Gas Calculator (6/2021).					

Total HAPs/TACs

Compound	CAS Number	PTE (TPY)	HAP	CAO
Organics				
1,2,4-Trimethylbenzene	95-63-6	8.84E-01	N	Y
1,3,5-Trimethylbenzene	108-67-8	3.53E-01	N	Y
1,1,2,2-Tetrachloroethane	79-34-5	4.5E-07	Y	Y
1,1,1-Trichloroethane	71-55-6	2.0E-05	Y	Y
1,1,2-Trichloroethane	79-00-5	2.7E-07	Y	Y
1,3-Butadiene	106-99-0	1.2E-04	Y	Y
1,4-Dichlorobenzene	106-46-7	1.8E-06	Y	Y
1,2-Dichloropropane	78-87-5	2.3E-07	Y	Y
1,3-Dichloropropene	542-75-6	2.3E-07	Y	Y
2-Aminoethanol	141-43-5	3.7E-02	N	N
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.8E+00	N	Y
4-Methyl-2-Pentanone (Methyl iso-Butyl Ketone)	108-10-1	7.7E+00	Y	Y
Acetaldehyde	75-07-0	1.0E-04	Y	Y
Acetonitrile	75-05-8	4.7E-05	Y	Y
Acetophenone	98-86-2	7.2E-04	Y	Y
Acrolein	107-02-8	1.5E-04	Y	Y
Aniline	62-53-3	1.1E-04	Y	Y
Benzene	71-43-2	1.9E-04	Y	Y
t-Butyl Acetate	540-88-6	3.7E-01	N	Y
Biphenyl	92-52-4	3.6E-06	Y	Y
bis(2-Ethylhexyl)phthalate	117-81-7	4.2E-05	Y	Y
Butyl Benzyl Phthalate	85-68-7	3.7E-01	N	Y
Carbon Disulfide	75-15-0	5.7E-05	Y	Y
Carbon Tetrachloride	56-23-5	3.1E-07	Y	Y
Chloroform	67-68-3	2.4E-07	Y	Y
Chloromethane	74-87-3	1.5E-05	Y	Y
Cumene	98-82-8	1.2E-01	Y	Y
Di-n-butylphthalate	84-74-2	4.3E-05	Y	Y
Dibenzofuran	132-64-9	7.6E-07	Y	Y
Dimethylphthalate	131-11-3	9.2E-07	Y	Y
Ethyl Benzene	100-41-4	2.6E+00	Y	Y
Ethylene Dibromide	106-93-4	3.9E-07	Y	Y
Ethylene Dichloride	107-06-2	2.0E-07	Y	Y
Formaldehyde	50-00-0	5.8E-04	Y	Y
Hexane	110-54-3	1.7E-04	Y	Y
Hexachloropentadiene	77-47-4	5.9E-02	Y	Y
Isocane	540-84-1	9.7E-06	Y	Y
Isophorone	78-59-1	7.6E-06	Y	Y
Methanol	67-56-1	5.4E-05	Y	Y
Methyl Methacrylate	80-62-6	3.7E-02	Y	Y
Methylene Chloride	75-09-2	2.8E-03	Y	Y
N,N-Dimethylaniline	121-69-7	1.2E-06	Y	Y
Naphthalene	91-20-3	4.8E-05	Y	Y
o-Toluidine	95-53-4	3.2E-05	Y	Y
Phenol	108-95-2	6.7E-05	Y	Y
PCM (including PAHs)		1.3E-06	Y	Y
Propylene Oxide	75-56-9	3.8E-04	Y	Y
Styrene	100-42-5	1.6E-04	Y	Y
Tetrachloroethene	127-18-4	1.1E-05	Y	Y
Toluene	108-88-3	6.1E+00	Y	Y
Vinyl Chloride	75-01-4	1.3E-07	Y	Y
Xylenes (total)	1330-20-7	1.2E+01	Y	Y
Inorganic Gases				
Ammonia	7664-41-7	4.10E-02	N	Y
Sulfuric Acid	7664-93-9	8.17E-01	N	Y
Metals				
Aluminum	7429-90-5	2.2E-01	N	Y
Arsenic compounds	7440-38-2	2.6E-06	Y	Y
Barium compounds	7440-39-3	5.0E-05	N	Y
Beryllium compounds	7440-41-7	1.5E-07	Y	Y
Cadmium compounds	7440-43-9	1.4E-05	Y	Y
Chromium (Total)	7440-47-3	4.6E-02	Y	Y
Chromium (VI)	18540-29-9	5.0E-04	Y	Y
Cobalt compounds	7440-48-4	1.1E-05	Y	Y
Copper	7440-50-8	9.5E-03	N	Y
Iron	7439-89-6	3.6E-01	N	Y
Lead	7439-92-1	6.4E-06	Y	Y
Manganese compounds	7439-96-5	5.2E-02	Y	Y
Mercury compounds	7439-97-6	3.3E-06	Y	Y
Molybdenum Trioxide	1313-27-5	2.1E-05	N	Y
Nickel compounds	365	9.5E-03	Y	Y
Phosphorus	7723-43-0	6.5E-06	Y	Y
Selenium compounds	7782-49-2	3.5E-01	Y	Y
Vanadium (fume or dust)	7440-62-2	2.9E-05	N	Y
Zinc oxide	1314-13-2	8.8E-01	N	Y
Zinc compounds	7440-66-6	3.7E-04	N	Y

PTE Total HAP (TPY) = 28.9
 PTE Max Individual HAP (TPY) = 11.8

*Facility requested limits on federal HAPs to be a synthetic minor.

Note:

PSELs are not required for regulated pollutants that will be emitted at less than the de minimis emission level listed in LRAPA Title 12 from the entire source.
 PSEL analysis only for units that are not categorically insignificant activities.