Lane Regional Air Protection Agency
Simple Air Contaminant Discharge Permit

Review Report

Pierce Fittings, Inc. **Permit No. 206405**
10 North Garfield Street
Eugene, Oregon 97402
Website: https://www.fresnovalves.com

Source Information:

Primary SIC	3479 – Coating, Engraving, and Allied Services, Not Elsewhere Classified
Secondary SIC	--
Primary NAICS	332812 Metal Coating – Galvanizing Metals

Secondary NAICS	--
Source Categories (LRAPA title 37, Table 1)	B.30: Galvanizing and Pipe Coating
Public Notice Category	III

Compliance and Emissions Monitoring Requirements:

Unassigned Emissions	N
Emission Credits	N
Special Conditions	N
Compliance Schedule	N

Source Test [date(s)]	N
COMS	N
CEMS	N
Ambient monitoring	N

Reporting Requirements

Annual Report (due date)	February 15
SACC (due date)	N
GHG Report (due date)	N
Quarterly Report (due date)	N

Monthly Report (due dates)	N
Excess Emissions Report	Y
Other Reports (due date)	N

Air Programs

NSPS (list subparts)	N
NESHAP (list subparts)	N
CAM	N
Regional Haze (RH)	N
TACT	N
40 CFR part 68 Risk Management	N
Synthetic Minor (SM)	N
SM-80	N

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

Permittee Identification

1. Pierce Fittings, Inc. ('the facility' or 'Pierce') operates a facility that prepares pipe fittings for use in farm irrigation systems at 10 North Garfield Street in Eugene, Oregon.

General Background

2. The main operation at the facility involves galvanizing steel through a series of steps. First the steel needs to be cleaned and degreased. Then it is dipped in a pickling bath consisting of heated sulfuric acid at ambient temperature. The pickling process removes mill scale and iron oxides. Abrasive blasting can be used in conjunction or instead of the pickling process. The last step before galvanizing is fluxing of the steel with a zinc ammonium chloride solution. Finally, the prepared steel is dipped into a bath of molten zinc. The zinc needs to be at least 98% pure and is kept between 815 ˚F and 850 ˚F (435 ˚C and 455 ˚C). The molten zinc reacts with the iron in the steel to create a corrosion-resistant alloy coating. If the surface of the steel is not properly prepared the surface will not react with the zinc and it will remain uncoated.

   The other significant emission units at the facility include welding operations that are directly exhausted to atmosphere through collection hoods, an adhesive spray booth, three (3) natural gas-fired ovens associated with an epoxy line (discussed below), and an abrasive blast booth.

   The facility also has an epoxy line that is controlled by dry filters and a powder reclamation system. Since this line exhausts into the building, it is not considered a source for air permitting purposes. The facility also has a small natural gas boiler with a maximum heat input rating of 0.398 MMBtu per hour which is considered a categorically insignificant activity.

   The facility began operation prior to 1974 when LRAPA initially issued an air permit to the facility. The facility typically operates 2,080 hours per year (1 shift).

Reasons for Permit Action and Fee Basis

3. This permit action is a renewal for an existing Simple Air Contaminant Discharge Permit (Simple ACDP) which was issued on November 19, 2018 and expired on November 19, 2023. As the facility submitted a timely renewal application on May 30, 2023, the expired permit will remain in effect until final action has been taken on the renewal application. Because the actual emissions for calendar year 2023 were less than 10 tons/year (TPY) for each criteria pollutant, the permit action is considered a Simple "low" ACDP renewal under LRAPA 37-0064(2)(a).

4. As part of this renewal, LRAPA is performing an Agency-initiated Type 3 change and associated permit modification to correct the PSELs for GHGs. In the previous permit, LRAPA incorrectly set the PSEL for GHGs as de minimis even though the CO and NOx resulting from natural gas combustion were set at the Generic PSELs allowed by rule at the time. The GHG PSEL has been set at a level which represents the potential GHG emissions from the facility.

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 inside the Eugene-Springfield UGB as defined in LRAPA 29-0010 which designates the Eugene-Springfield CO and PM_{10} maintenance areas. The facility is also located inside the Eugene-Springfield UGB as described in the current Eugene-Springfield Metropolitan Area General Plan, as amended.

Permitting History

6. LRAPA has reviewed and issued the following permitting actions to this facility since 1974:

Date(s) Approved/Valid	Permit Action Type	Description
01/01/1974 – 12/31/1978	ACDP	Initial permit

Date(s) Approved/Valid	Permit Action Type	Description
01/01/1979 - 12/31/1982	Minimal Source ACDP	Renewal
01/01/1983 – 12/31/1992	Minimal Source ACDP	Renewal
01/01/1993 – 12/31/1997	ACDP	Renewal
09/18/1995	Unknown	Unknown administrative change
01/01/1998 – 12/31/2002	Minimal Source ACDP	Renewal
05/10/2000	Approval to Construct NC-206405-A00	Replacement of a baghouse
01/01/2003 – 12/31/2007	Minimal Source ACDP	Renewal
01/01/2008 – 12/31/2012	Simple ACDP	Renewal
08/19/2008	Addendum 1	Change facility name
05/08/2009	Addendum 1	Change permit type and fee basis
01/29/2013 – 01/29/2018	Simple ACDP	Renewal
11/19/2018 – 11/19/2023	Simple ACDP	Renewal
Upon Issuance	Simple ACDP	Renewal

Compliance History

7. This facility has been inspected by LRAPA. The following table indicates the inspection history of this facility since 1998.

Agency	Type of Inspection	Date	Results
LRAPA	Full Compliance Evaluation	02/27/1998	No areas of non-compliance discovered.

8. LRAPA has not issued any violation notices and/or taken enforcement action against this facility since at least 1998.

Source Testing

9. 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.

Emission Unit Description

10. The emission units regulated by this permit are the following:

EU ID	Emission Unit Description	PCD ID	Pollution Control Device Description	Installed / Last Modified
EU-1	Three (3) Natural Gas-Fired Ovens	NA	NA	1989
EU-2	Adhesive Spray Booth	PCD-2	Dry filters	1995
EU-3	Hot Dip Galvanizing – Zinc	NA	NA	<1974
EU-4	Hot Dip Galvanizing – Sulfuric Acid	NA	NA	<1974
EU-6	Welding (GMAW)	NA	NA	<1974
EU-8	Abrasive Shot Blasting	PCD-8A PCD-8B	Baghouse #1 (2022) Baghouse #2 (2013)	2013

11. As part of this renewal, the emission units regulated by this permit were revised.
    - 11a. Emission unit identification numbers were simplified. Previous emission units EU-5 (GMAW – Carbon Steel Welding) and EU-6 (GMAW – Stainless Steel Welding) were consolidated into EU-6 – Welding (GMAW).
    - 11b. Previous emission unit EU-1 (one (1) Natural Gas-Fired Boiler and three (3) Natural Gas-Fired Ovens) was modified to remove the natural gas-fired boiler because this emission unit is considered a categorically insignificant activity.

11c. Emission unit EU-7 (Epoxy Powder Coating Booth) was removed because this emission unit does not contribute any emissions to the atmosphere. 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.

Significant Emission Units

12. Emission Unit EU-1
The facility has three (3) natural gas-fired ovens installed in 1989. Two (2) ovens service the epoxy spray booth and have a maximum heat input rating of 3.5 MMBtu per hour and 2.5 MMBtu per hour, respectively. The facility also has one (1) burn out oven for maintenance cleaning of hangars and parts for the epoxy spray booth. The burn out oven has a main burner with a maximum heat input rating of 0.8 MMBtu per hour and an after burner with a maximum heat input rating of 0.8 MMBtu per hour. The criteria pollutant and greenhouse gas (GHG) emissions from these emission units are based on emission factors derived from DEQ AQ-EF05 – Emission Factors Gas Fired Boilers and US EPA 40 CFR 98, Tables C-1 and C-2. The federal hazardous air pollutants (FHAP) or Cleaner Air Oregon (CAO) toxic air contaminant (TAC) emissions from these emission units are based on emission factors from DEQ's 2020 Air Toxics Emission Inventory Combustion Emission Factor Tool.

13. Emission Unit EU-2
The facility has one (1) adhesive spray booth used to spray coat metal discs. The facility uses a conventional spray gun to apply an adhesive coating. The assumed minimum coating transfer efficiency is at least 90% due to the size and flatness of the parts. The facility uses dry filters to control overspray particulate matter (PM). These dry filters have a removal efficiency of at least 98%. The estimated maximum coating usage provided in previous air permit applications, in gallons, at 2,080 hours was scaled up to 8,760 hours to represent potential emissions. This emission unit was last modified in 1995 when it was moved to the current location.

14. Emission Unit EU-3
This process represents the hot dip galvanizing line molten zinc bath. Particulate matter emission factors for this process are derived from US EPA, AP-42, Section 12.14 – Secondary Zinc, Table 12.14-2 (galvanizing). Emissions factors for PM_{10} and $PM_{2.5}$ were assumed to be 50 percent of the PM emission factor. The estimated maximum zinc usage, in tons, at 2,080 hours is based on the maximum zinc usage during calendar years 2018 through 2023. Capacity and potential emissions for this process are based on a ratio of 8,760 hours to 2,080 hours. The hot dip galvanizing line was constructed prior to 1974 and was reconstructed in 2021. The reconstruction is not considered to have resulted in a modification of the line because no increase in the potential to emit of any regulated pollutant on an hourly basis appears to have occurred.

15. Emission Unit EU-4
This process represents the hot dip galvanizing line sulfuric acid bath. Particulate matter emission factors for this process are derived from the Texas Commission on Environmental Quality Calculation Guidance Package – Hot Dip Galvanizing assuming a 50% control of fugitive emissions. The hot dip galvanizing line was constructed prior to 1974 and was reconstructed in 2021. The reconstruction is not considered to have resulted in a modification of the line because no increase in the potential to emit of any regulated pollutant on an hourly basis appears to have occurred.

16. Emission Unit EU-6
This process represents production-related welding operations. The facility currently uses gas metal arc welding (GMAW), sometimes referred to as metal inert gas (MIG) welding. The

common welding wires used for this process include E308L and E70S. Particulate matter emission factors for this process are derived from US EPA, AP-42, Section 12.19 – Electric Arc Welding, Table 12.19-1. The estimated welding wire usage, in 1000 pounds, at 2,080 hours is based on the maximum welding wire usage during calendar years 2018 through 2023. Capacity and potential emissions for this process are based on a ratio of 8,760 hours to 2,080 hours. This emission unit was installed prior to 1974.

17. Emission Unit EU-8
This process represents production abrasive blast booth operations. Particulate matter emissions are controlled by two (2) baghouses with an estimated minimum efficiency of 99%. Particulate matter emission factors for this process are from the San Diego Air Pollution Control District abrasive blasting information for steel shot. The estimated maximum abrasive usage provided in previous air permit applications, in pounds, at 2,080 hours was scaled up to 8,760 hours to represent capacity and potential emissions. This emission unit was constructed in 2013. Baghouse #2 was relocated from a discontinued abrasive blast booth operation in 2013. Baghouse #1 was installed in 2022.

Nuisance, Deposition and Other Emission Limitations

18. 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.

19. 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.

20. 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.

Performance Standards and Limitations

21. 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 in any six-minute block average. Compliance is demonstrated through a plant survey of visible emissions using EPA Method 22 to be completed at least once a quarterly. 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. In addition, the permittee must prepare and maintain an Operation & Maintenance Plan (O&M Plan) for all particulate matter emission control devices at the facility.

22. The non-fuel burning equipment at this source that emit particulate matter are 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 month. The permittee is required to take corrective action if any visible emissions are identified or conduct EPA Method 9 test if the visible emissions cannot be eliminated. In addition, the permittee must prepare and maintain an O&M Plan for all particulate matter emission control devices at the facility.

23. Each emission unit at the facility is subject to the process weight rate emission limitations under LRAPA 32-045(1) unless exempt under the rule. 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 month. 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. In addition, the permittee must prepare and maintain an O&M Plan for all particulate matter emission control devices at the facility.

24. The 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 O&M Plan.

Typically Achievable Control Technology (TACT)

25. LRAPA 32-008(1) requires an existing unit at a facility prior to January 1, 1994, meet TACT if the emission unit meets the following criteria: The emission unit is not already subject to emission standards for the regulated pollutant under LRAPA title 30, title 32, title 33, title 38, title 39 or title 46 at the time TACT is required; the source is required to have a permit; the emission unit has emissions of criteria pollutants equal to or greater than five (5) tons per year of particulate or ten (10) tons per year of any gaseous pollutant; and LRAPA determines that air pollution control devices and emission reduction processes in use for the emissions do not represent TACT and that further emission control is necessary to address documented nuisance conditions, address an increase in emissions, ensure that the source is in compliance with other applicable requirements, or to protect public health or welfare, or the environment.
    25a. The following emission units are not subject to TACT because they do not have emissions of criteria pollutants equal to or greater than five (5) tons per year of particulate or ten (10) tons per year of any gaseous pollutant: EU-1, EU-3, EU-4, EU-6.

26. LRAPA 32-008(2) requires new units installed or existing emission units modified on or after January 1, 1994, meet TACT if the emission unit meets the following criteria: The emission 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 emission unit has emissions of any criteria pollutant equal to or greater than one (1) ton per year of any criteria pollutant; if modified, the emission 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.
    26a. The following emission units are not subject to TACT because they do not have emissions of criteria pollutants equal to or greater than one (1) ton per year: EU-8.
    26b. The following emission units are subject to TACT because they have emissions of criteria pollutants equal to or greater than one (1) ton per year: EU-2. While LRAPA has not performed a formal TACT determination for VOCs from this emission unit, LRAPA has determined that the following requirements likely meet TACT: (1) prohibiting manual spray gun system cleaning from being performed outside a container that collects the gun cleaning solvent, and (2) keep VOC-containing materials closed when not in use. Add-on control technology for VOCs emitted by spray booths is not typically economically

feasible due to the low concentration of VOCs and the high air flow rates resulting from these processes.

Plant Site Emission Limits (PSELs)

27. 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)		PSEL Increase Over Netting Basis (TPY)	Significant Emission Rate (TPY)
		Previous (TPY)	Proposed (TPY)	Previous PSEL (TPY)	Proposed PSEL (TPY)		
PM	0	0	0	24	de minimis	NA	25
PM_{10}	0	0	0	14	de minimis	NA	15
$PM_{2.5}$	0	0	0	9	de minimis	NA	10
CO	0	0	0	99	2.7	2.7	100
NO_X	0	0	0	39	3.2	3.2	40
SO_2	0	0	0	de minimis	de minimis	NA	40
VOC	0	0	0	39	2.7	2.7	40
GHG	0	0	0	de minimis	3,898	3,898	75,000

27a. For criteria pollutants and GHGs, the facility does not have a baseline emission rate. While the facility was in operation since before the 1977 or 1978 baseline years, the facility has never provided the information necessary to estimate baseline emission rates.

27b. Because the baseline emission rates are zero (0), the netting basis for all pollutants is zero (0) in accordance with LRAPA 42-0046(2)(a)&(b).

27c. In accordance with OAR 340-222-0041(2), the PSELs for CO, NOx, and VOC have been set equal to the source's potential-to-emit (PTE). The previous PSELs for these pollutants were set at Generic PSELs that are no longer allowed. No PSELs are set for PM, PM_{10}, $PM_{2.5}$, and SO_2 in accordance with LRAPA 42-0020(3)(a) because these pollutants are emitted below the de minimis as defined in LRAPA title 12.

Unassigned Emissions and Emission Reduction Credits

28. 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)

29. This source is located in an area that is designated attainment or unclassified for all regulated pollutants other than CO and PM_{10}. For pollutants other than CO and PM_{10}, 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. For CO and PM_{10}, the source is located in a maintenance area. The proposed PSELs for CO and PM_{10} are less than the 100 TPY threshold that determines the applicability of Major NSR in a maintenance area.

Federal Hazardous Air Pollutants/Toxic Air Contaminants

30. 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 below the major source thresholds of 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 2.12 tons per year (xylenes). The potential aggregate of federal HAP emissions are 3.21 tons per year. The facility is considered a natural minor or area source of federal HAPs.

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. This source has not been notified by LRAPA and is, therefore, not yet required to perform a risk assessment or report annual emissions of toxic air contaminants. LRAPA required reporting of approximately 600 toxic air contaminants in 2016 and regulates approximately 260 toxic air contaminants that have Risk Based Concentrations established in the rule. All federal HAPs are on the list of approximately 600 toxic air contaminants. After the source is notified by LRAPA, they must update their inventory and perform a risk assessment to see if they must reduce risk from their toxic air contaminant emissions. Until then, sources will be required to report toxic air contaminant emissions triennially.

CAS/DEQ Number	Pollutant	PTE (TPY)	Federal HAP	CAO TAC
Organics				
101-68-8	4,4'-Diphenylmethane diisocyanate	3.3E-04	Yes	Yes
75-07-0	Acetaldehyde	1.4E-04	Yes	Yes
107-02-8	Acrolein	8.8E-05	Yes	Yes
71-43-2	Benzene	2.6E-04	Yes	Yes
100-41-4	Ethyl Benzene	0.49	Yes	Yes
50-00-0	Formaldehyde	5.5E-04	Yes	Yes
110-54-3	Hexane	2.0E-04	Yes	Yes
91-20-3	Naphthalene	9.7E-06	Yes	Yes
401	POM (inc. PAHs)	3.2E-06	Yes	Yes
108-88-3	Toluene	1.2E-03	Yes	Yes
1330-20-7	Xylenes	2.12	Yes	Yes
Inorganic Gases				
7664-41-7	Ammonia	1.0E-01	No	Yes
7664-93-9	Sulfuric Acid	1.6E-02	No	Yes
Metals				
7440-38-2	Arsenic and compounds	6.5E-06	Yes	Yes
7440-39-3	Barium and compounds	1.4E-04	No	Yes
7440-41-7	Beryllium and compounds	3.9E-07	Yes	Yes
7440-43-9	Cadmium and compounds	4.0E-05	Yes	Yes
13548-38-4	Chromium (III)	0.30	Yes	No
18540-29-9	Chromium (VI)	4.5E-05	Yes	Yes
7440-48-4	Cobalt and compounds	5.7E-04	Yes	Yes
7440-50-8	Copper and compounds	3.1E-05	No	Yes
7439-92-1	Lead and compounds	2.0E-05	Yes	Yes
7439-96-5	Manganese and compounds	0.20	Yes	Yes
7440-50-8	Mercury and compounds	8.4E-06	Yes	Yes
1313-27-5	Molybdenum Trioxide	5.4E-05	No	Yes
7440-02-0	Nickel compounds, insoluble	0.10	Yes	Yes
7782-49-2	Selenium and compounds	7.8E-07	Yes	Yes
7440-62-2	Vanadium (fume or dust)	7.5E-05	No	Yes
7440-66-6	Zinc and compounds	0.56	No	Yes
		Total (TPY) =	3.21	3.59

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. For calendar year 2022, this facility reported the emissions of the following chemicals:

Chemical Name	CAS Number	Fugitive Release (pounds)	Stack Release (pounds)	Total Releases / Transfers (pounds)
Zinc Compounds	N982 (TRI-specific)	194	--	194

New Source Performance Standards (NSPSs)

33. 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)

34. LRAPA reviewed the following NESHAPs to determine their applicability to this facility:

34a. 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.

34b. 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 sprayed at the facility do not contain the target HAPs listed under the regulation of chromium, lead, manganese, nickel or cadmium.

34c. 40 CFR Part 63, Subpart XXXXXX - National Emission Standards for Hazardous Air Pollutants: Nine Metal Fabrication and Finishing Source Categories is not applicable to the source because the facility is not primarily engaged in the operations listed in 40 CFR 63.11514(a).

Recordkeeping Requirements

35. 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			

Activity	Parameter	Units	Minimum Recording Frequency
Adhesive	Material name and usage	Gallons	Monthly
Adhesive	VOC content	Lb/gallon	Each adhesive
Natural gas	Usage	MMcf	Monthly
General Recordkeeping			
Galvanizing – zinc	Usage	Tons	Annually
Galvanizing – sulfuric acid	Usage	Gallons	Annually
Welding wire/rod	Usage	Pounds	Annually
Abrasive blasting media	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	%	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 of the permit.	NA	NA	Per occurrence

Reporting Requirements

36. 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 of the permit, including supporting calculations.	Annual	February 15
Galvanizing line – zinc usage	Annual	February 15
Galvanizing line – sulfuric acid usage	Annual	February 15
Welding wire/rod usage	Annual	February 15
Abrasive blasting media usage	Annual	February 15
A summary of maintenance and repairs performed on any pollution control devices at the facility.	Annual	February 15
A summary of all complaints received by the permittee and their resolution as required by Condition G11 of the permit.	Annual	February 15
The upset log information required by Condition G14 of the permit, if any planned or unplanned excess emissions have occurred during the reporting period.	Annual	February 15

37. 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 CO_2 equivalents per year. If the source ever emits more than this amount, they will be required to report greenhouse gas emissions.

Public Notice

38. Pursuant to OAR 340-216-0065(5)(a), which became effective on March 1, 2023, issuance of a renewed Simple Air Contaminant Discharge Permit requires public notice in accordance with OAR 340-209-0030(3)(c) [aka LRAPA 31-0030(3)(c)], which requires LRAPA to provide notice of the proposed permit action and a minimum of 35 days for interested persons to submit written comments.

    The proposed permit was on public notice from April 17, 2024 to May 23, 2024. No written comments were submitted during the public comment period. No public hearing was requested by ten (10) or more individuals or an individual representing a group of more than ten (10) individuals.

JJW/AA
05/28/2024

Emission Details

Pierce Fittings - 206405
Emission Detail Sheets
Facility Potential Emissions Summary

Criteria Pollutant Emissions

	PM (TPY)	PM_{10} (TPY)	$PM_{2.5}$ (TPY)	NOx (TPY)	CO (TPY)	SO_2 (TPY)	VOC (TPY)	GHG (TPY)
PTE	0.97	0.69	0.69	3.24	2.73	0.06	2.71	3,898
PSEL	de minimis	de minimis	de minimis	3.2	2.7	de minimis	2.7	3,898
CIA	4.2E-03	4.2E-03	4.2E-03	0.14	0.17	2.9E-03	9.3E-03	204

FHAP/TAC Emissions

Pollutant	CAS/DEQ Number	Potential Annual Emissions (TPY)	Federal HAP	CAO Air Toxic
Organics				
4,4'-Diphenylmethane diisocyanate	101-68-8	3.3E-04	Yes	Yes
Acetaldehyde	75-07-0	1.4E-04	Yes	Yes
Acrolein	107-02-8	8.8E-05	Yes	Yes
Benzene	71-43-2	2.6E-04	Yes	Yes
Ethyl Benzene	100-41-4	0.49	Yes	Yes
Formaldehyde	50-00-0	5.5E-04	Yes	Yes
Hexane	110-54-3	2.0E-04	Yes	Yes
Naphthalene	91-20-3	9.7E-06	Yes	Yes
POM (inc. PAHs)	401	3.2E-06	Yes	Yes
Toluene	108-88-3	1.2E-03	Yes	Yes
Xylenes	1330-20-7	2.12	Yes	Yes
Inorganic Gases				
Ammonia	7664-41-7	1.0E-01	No	Yes
Sulfuric Acid	7664-93-9	1.6E-02	No	Yes
Metals				
Arsenic and compounds	7440-38-2	6.5E-06	Yes	Yes
Barium and compounds	7440-39-3	1.4E-04	No	Yes
Beryllium and compounds	7440-41-7	3.9E-07	Yes	Yes
Cadmium and compounds	7440-43-9	3.8E-05	Yes	Yes
Chromium (III)	13548-38-4	0.30	Yes	No
Chromium (VI)	18540-29-9	4.5E-05	Yes	Yes
Cobalt and compounds	7440-48-4	5.7E-04	Yes	Yes
Copper and compounds	7440-50-8	3.0E-05	No	Yes
Lead and compounds	7439-92-1	1.9E-05	Yes	Yes
Manganese and compounds	7439-96-5	0.20	Yes	Yes
Mercury and compounds	7440-50-8	8.4E-06	Yes	Yes
Molybdenum Trioxide	1313-27-5	5.4E-05	No	Yes
Nickel compounds, insoluble	7440-02-0	0.10	Yes	Yes
Selenium and compounds	7782-49-2	7.8E-07	Yes	Yes
Vanadium (fume or dust)	7440-62-2	7.5E-05	No	Yes
Zinc and compounds	7440-66-6	0.56	No	Yes
Total Emissions (TPY) =		3.89	3.21	3.59
Max Individual FHAP (TPY) =			2.12	

Notes:

Pierce Fittings - 206405
Emission Detail Sheets
CIA Emission Calculations

Boiler Specifications

Max Heat Input	0.398	MMBtu/hr
Heat Value - Natural Gas	1026	MMBtu/MMcf
Max Hrs Operation	8760	hr/yr

Criteria Pollutants

Pollutant	NG Emission Factor (lb/MMCF)	NG EF Units	Potential Annual Emissions (TPY)
PM	2.5	lb/MMcf	0.00
PM_{10}	2.5	lb/MMcf	0.00
$PM_{2.5}$	2.5	lb/MMcf	0.00
Carbon Monoxide	84	lb/MMcf	0.14
Nitrogen Oxides	100	lb/MMcf	0.17
Sulfur Dioxide	1.7	lb/MMcf	0.00
VOCs	5.5	lb/MMcf	0.01
GHGs (CO_2 equiv.)	117	lb/MMBtu	204

FHAP/TAC Emissions

Pollutant	NG Emission Factor (lb/MMcf)	Potential Annual Emissions (TPY)	Federal HAP	CAO Air Toxic
Organics				
Acetaldehyde	4.30E-03	7.3E-06	Yes	Yes
Acrolein	2.70E-03	4.6E-06	Yes	Yes
Benzene	8.00E-03	1.4E-05	Yes	Yes
Ethyl Benzene	9.50E-03	1.6E-05	Yes	Yes
Formaldehyde	1.70E-02	2.9E-05	Yes	Yes
Hexane	6.30E-03	1.1E-05	Yes	Yes
Naphthalene	3.00E-04	5.1E-07	Yes	Yes
POM (inc. PAHs)	1.00E-04	1.7E-07	Yes	Yes
Toluene	3.66E-02	6.2E-05	Yes	Yes
Xylenes	2.72E-02	4.6E-05	Yes	Yes
Inorganic Gases				
Ammonia	3.2000	5.4E-03	No	Yes
Metals				
Arsenic and compounds	2.0E-04	3.4E-07	Yes	Yes
Barium and compounds	4.4E-03	7.5E-06	No	Yes
Beryllium and compounds	1.2E-05	2.0E-08	Yes	Yes
Cadmium and compounds	1.1E-03	1.9E-06	Yes	Yes
Chromium, Hexavalent	1.4E-03	2.4E-06	Yes	Yes
Cobalt and compounds	8.4E-05	1.4E-07	Yes	Yes
Copper and compounds	8.5E-04	1.4E-06	No	Yes
Lead and compounds	5.0E-04	8.5E-07	Yes	No
Manganese and compounds	3.8E-04	6.5E-07	Yes	Yes
Mercury and compounds	2.6E-04	4.4E-07	Yes	Yes
Molybdenum Trioxide	1.7E-03	2.8E-06	No	Yes
Nickel compounds, insoluble	2.1E-03	3.6E-06	Yes	Yes
Selenium and compounds	2.4E-05	4.1E-08	Yes	Yes
Vanadium (fume or dust)	2.3E-03	3.9E-06	No	Yes
Zinc and compounds	2.9E-02	4.9E-05	No	Yes
	Total Emissions =	5.7E-03	2.0E-04	5.7E-03

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_2O)	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).
Elemental lead is not a HAP.
The facility has one boiler rated at 0.398 MMBtu per hour.

Pierce Fittings - 206405
Emission Detail Sheets
Combustion Emission Calculations (EU-1)

Boiler Specifications

Max Heat Input	7.60	MMBtu/hr
Heat Value - Natural Gas	1026	MMBtu/MMcf
Max Hrs Operation	8760	hr/yr

Criteria Pollutants

Pollutant	NG Emission Factor (lb/MMCF)	NG EF Units	Potential Annual Emissions (TPY)
PM	2.5	lb/MMcf	0.08
PM_{10}	2.5	lb/MMcf	0.08
$PM_{2.5}$	2.5	lb/MMcf	0.08
Carbon Monoxide	84	lb/MMcf	2.73
Nitrogen Oxides	100	lb/MMcf	3.24
Sulfur Dioxide	1.7	lb/MMcf	0.06
VOCs	5.5	lb/MMcf	0.18
GHGs (CO_2 equiv.)	117	lb/MMBtu	3,898

FHAP/TAC Emissions

Pollutant	NG Emission Factor (lb/MMcf)	Potential Annual Emissions (TPY)	Federal HAP	CAO Air Toxic
Organics				
Acetaldehyde	4.30E-03	1.4E-04	Yes	Yes
Acrolein	2.70E-03	8.8E-05	Yes	Yes
Benzene	8.00E-03	2.6E-04	Yes	Yes
Ethyl Benzene	9.50E-03	3.1E-04	Yes	Yes
Formaldehyde	1.70E-02	5.5E-04	Yes	Yes
Hexane	6.30E-03	2.0E-04	Yes	Yes
Naphthalene	3.00E-04	9.7E-06	Yes	Yes
POM (inc. PAHs)	1.00E-04	3.2E-06	Yes	Yes
Toluene	3.66E-02	1.2E-03	Yes	Yes
Xylenes	2.72E-02	8.8E-04	Yes	Yes
Inorganic Gases				
Ammonia	3.2000	1.0E-01	No	Yes
Metals				
Arsenic and compounds	2.0E-04	6.5E-06	Yes	Yes
Barium and compounds	4.4E-03	1.4E-04	No	Yes
Beryllium and compounds	1.2E-05	3.9E-07	Yes	Yes
Cadmium and compounds	1.1E-03	3.6E-05	Yes	Yes
Chromium, Hexavalent	1.4E-03	4.5E-05	Yes	Yes
Cobalt and compounds	8.4E-05	2.7E-06	Yes	Yes
Copper and compounds	8.5E-04	2.8E-05	No	Yes
Lead and compounds	5.0E-04	1.6E-05	Yes	No
Manganese and compounds	3.8E-04	1.2E-05	Yes	Yes
Mercury and compounds	2.6E-04	8.4E-06	Yes	Yes
Molybdenum Trioxide	1.7E-03	5.4E-05	No	Yes
Nickel compounds, insoluble	2.1E-03	6.8E-05	Yes	Yes
Selenium and compounds	2.4E-05	7.8E-07	Yes	Yes
Vanadium (fume or dust)	2.3E-03	7.5E-05	No	Yes
Zinc and compounds	2.9E-02	9.4E-04	No	Yes
	Total Emissions =	1.1E-01	3.8E-03	1.1E-01

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_2O)	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).
Elemental lead is not a HAP.
The facility has two curing ovens rated at 3.5 MMBtu per hour and 2.5 MMBtu per hour.
The facility has one burn out oven with a main burner rated at 0.8 MMBtu per hour and an afterburner rated at 0.8 MMBtu per hour.

Pierce Fittings - 206405
Emission Detail Sheets
Adhesive Spray Booth (EU-2)

2,080	= Facility actual hours
8,760	= Facility potential hours
200	= Max usage at 2,080 hours (gal/yr)
90%	= Minimum Coating Transfer Efficiency
98.00%	= Minimum Filter PM Removal Efficiency

Criteria Pollutants

Manufacturer	Product Name	Usage (gal)	Density (lbs/gal)	VOC (lbs/gal)	Volatile (% wt.)	Solids (% wt)	Solids Usage	PM Capacity	PM Potential	VOC Capacity	VOC Potential
Lord	Chemlok 6150 Adhesive	842	7.73	6.00	76.80%	23.20%	1511	7.6E-02	1.5E-03	2.53	2.53
							Total Emissions (TPY) =	**7.6E-02**	**1.5E-03**	**2.53**	**2.53**

HAP/TAC Emissions

		Ethylbenzene (100-41-4)		**4,4'-Diphenylmethane diisocyanate (101-68-8)**		**Xylene (1330-20-7)**	
Manufacturer	**Product Type**	**% wt.**	**lbs/yr**	**% wt.**	**lbs/yr**	**% wt.**	**lbs/yr**
Lord	Chemlok 6150 Adhesive	15.00%	977	5.00%	6.5E-01	65.00%	4,232
		TPY =	**0.49**	***TPY =***	**3.3E-04**	***TPY =***	**2.12**

Note:
PM emissions represents PM / PM10 / PM2.5 emissions.
Removal efficiency is based on filter manufacturer information.
The actual VOC content of Chemlok 6150 is 5.93 lbs/gal. Rounded to 6.0 lb/gal to allow for changes by the manufacturer.

Pierce Fittings - 206405
Emission Detail Sheets
Hot Dip Galvanizing Operations (EU-3)

2,080	= Facility actual hours
8,760	= Facility potential hours
53	= Max usage at 2,080 hours (ton Zn)

Criteria Pollutants

Pollutant	Usage (ton Zn)	Emission Factor (lbs/ton Zn)	PM Capacity Emissions (TPY)	PM Potential Emissions (TPY)
PM	225.1	5.0	0.56	0.56
PM_{10}	225.1	2.5	0.28	0.28
$PM_{2.5}$	225.1	2.5	0.28	0.28

Zinc Usage	ton Zn/yr
2023	43
2022	42
2021	53
2020	44
2019	46
2018	53

HAP/TAC Emissions

Zinc (7440-66-6)	
% wt.	**TPY**
100.00%	0.56
***TPY* =**	**0.56**

Notes:
Emission factors derived from US EPA, AP-42, Table 12.14-2.
PM10 / PM2.5 assumed to be 50% of PM.
Maximum usage based on highest usage for calendar years 2018 through 2023.

Pierce Fittings - 206405
Emission Detail Sheets
Sulfuric Acid Bath (EU-4)

8,760	= Facility potential hours
48	= Surface area of tanks (ft2)

Criteria Pollutants

Pollutant	Surface area of tanks (ft2)	Emission Factor (lbs/hr-ft2)	Control Emission Factor	Capacity Emissions (TPY)	Potential Emissions (TPY)
PM/PM10/PM2.5	48	0.00015	50%	1.6E-02	1.6E-02

HAP/TAC Emissions

Sulfuric Acid (7664-93-9)	
% wt.	**lbs/yr**
100.00%	32
***TPY* =**	**1.6E-02**

Notes:

Emission factors derived from Texas Commission on Environmental Quality (TCEQ), Calculation Guidance Package - Hot Dip Galvanizing.

Control emission factor for uncontrolled fugitive emissions was used (50%).

Pierce Fittings - 206405
Emission Detail Sheets
Welding Operations (EU-6)

2,080	= Facility actual hours
8,760	= Facility potential hours
27.032	= Max usage at 2,080 hours (1000 lb wire/yr)

Criteria Pollutants

Pollutant	Cas No.	Capacity Emissions (TPY)	Potential Emissions (TPY)
PM/PM10/PM2.5	--	0.31	0.31

HAP/TAC Emissions

Pollutant	Cas No.	Capacity Emissions (TPY)	Potential Emissions (TPY)
Chromium (Total)	7440-47-3	3.0E-01	3.0E-01
Chromium (VI)	18540-29-9	0.0E+00	0.0E+00
Cobalt	7440-48-4	5.7E-04	5.7E-04
Manganese	7439-96-5	2.0E-01	2.0E-01
Nickel	7440-02-0	1.0E-01	1.0E-01
Lead	7439-92-1	0.0E+00	0.0E+00

Welding Wire/Rod Emission Factors

Process	Type	Emission Factors (lb/10^3 lb) Fume	Chromium	Cromium (VI)	Cobalt	Manganese	Nickel	Lead
GMAW	E308l	5.4	5.24	ND	0.01	3.46	1.84	ND
GMAW	E70S	5.2	0.01	ND	0.01	3.18	0.01	ND

Wire Usage	1000 lb wire/yr
2023	26.297
2022	19.780
2021	27.032
2020	24.863
2019	25.234
2018	25.655

Notes:
Emission factors derived from US EPA, AP-42, Table 12.19-1.
Assumes highest emitting welding wire/rod.
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.
Maximum usage based on highest usage for calendar years 2018 through 2023.

Pierce Fittings - 206405
Emission Detail Sheets
Blast Booth (EU-8)

2,080	= Facility actual hours
8,760	= Facility potential hours
99.00%	= Minimum Filter PM Removal Efficiency
44,033	= Max usage at 2,080 hours (lb abrasive/yr)

Criteria Pollutants

Pollutant	CAS No.	Emission Factor (lb/ton)	Capacity Emissions (TPY)	Potential Emissions (TPY)
PM/PM10/PM2.5	--	10	0.46	4.6E-03

Abrasive Usage	lb abrasive/yr
2023	23,400
2022	36,543
2021	23,715
2020	19,652
2019	29,877
2018	44,033

HAP/TAC Emissions

Pollutant	CAS No.	Emission Factor (lb/ton)	Uncontrolled Emissions (TPY)	Potential Emissions (TPY)
Cadmium	7440-43-9	4.8E-03	2.6E-04	2.6E-06
Chromium (III)	7440-47-3	4.8E-02	2.7E-03	2.7E-05
Copper	7440-50-8	4.3E-03	2.4E-04	2.4E-06
Lead	7439-92-1	4.3E-03	2.4E-04	2.4E-06
Manganese	7439-96-5	4.8E-02	2.7E-03	2.7E-05
Nickel	7440-02-0	4.8E-02	2.7E-03	2.7E-05

Notes:
Steel shot abrasive emission factors from San Diego Air Pollution Control District.
Facility uses steel shot as abrasive media.
PM_{10} and $PM_{2.5}$ emissions are assumed to equal total particulate matter due to lack of information.