Lane Regional Air Protection Agency
Simple Air Contaminant Discharge Permit

Review Report

Carry-On Trailer Corporation **Permit No. 201313**
91218 North Coburg Industrial Way
Coburg, OR 97408
Website: https://www.carry-ontrailer.com

Source Information:

SIC	3715
NAICS	336212
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	N
Emission Credits	N
Compliance Schedule	N
Source Test [date(s)]	N

COMS	N
CEMS	N
Ambient monitoring	N

Reporting Requirements

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

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

Air Programs

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

Major FHAP Source	N
Federal Major Source	N
TACT	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. Carry-On Trailer Corporation ("the facility" or "Carry-On Trailer") manufactures utility and cargo trailers at 91218 North Coburg Industrial Way in Coburg, Oregon. The facility began operation in 2013.

2. The facility operates under the primary Standard Industrial Classification (SIC) code of 3715 – Truck Trailers and the primary North American Industry Classification System (NAICS) code of 336212 – Truck Trailer Manufacturing.

General Background Information

3. The facility operations include cutting, grinding, welding, coating, and final assembly. All operations are conducted inside a building. All coating operations are conducted in a paint booth (PB-1). The paint booth is equipped with dry filters to control particulate matter emissions from paint overspray. The paint booth includes a 1.2 MMBtu per hour natural gas-fired make-up air unit (MAU) to provide conditioned air primarily in the winter. The make-up air unit is considered a categorically insignificant activity. 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 renewal of an existing Simple Air Contaminant Discharge Permit (ACDP) that was issued on July 1, 2019 and was originally scheduled to expire on July 1, 2024. The facility submitted a renewal application on January 19, 2024. Because the facility submitted a timely renewal application at least 120 days prior to the expiration of the Simple ACDP, the facility is authorized to continue operating until the Simple ACDP is renewed. The renewed 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 PM_{10} 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. LRAPA has reviewed and issued the following permitting actions to this facility since the last Simple ACDP renewal was issued on July 1, 2019:

Date(s) Approved/Valid	Permit Action Type	Description
07/01/2019 – 07/01/2024	Simple ACDP	Renewal
09/10/2024 – 09/10/2034	Simple ACDP	Renewal

Emission Unit Descriptions

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

Emission Unit ID	Emission Unit Description	Pollution Control Device (PCD ID)	Installed / Last Modified
Significant Emission Units			
PB-1	Paint Booth	Dry Filters (DF-1)	2013
Welding	Welding	NA	2013
Categorically Insignificant Activity			
CIA-1	1.2 MMBtu per hour natural gas fired MAU	NA	2013

Significant Emission Units

8. PB-1: The facility operates one (1) spray booth. 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. In the last ten (10) years, the highest year of VOC emissions from coating usage was 13.68 tons in calendar year 2019. Potential VOC and HAP emissions are based product usage in calendar year 2023 ratioed up to calendar year 2019 emissions. The result of this calculation is increased by the ratio of 8,760 hours per year divided by 2,080 hours per year. The total particulate matter emissions from the facility were determined to be de minimis on a potential-to-emit basis.

9. Welding: The facility operates conducts GMAW welding operations. Welding emission factors are derived from US EPA AP-42 – Chapter 12.19 based on the welding wire/rod consumed. Potential particulate matter emissions and HAP/TAC emissions are welding wire/rod consumed in 2023 increasedby the ratio of 8,760 hours per year divided by 2,080 hours per year. The total particulate matter emissions from the facility were determined to be de minimis on a potential-to-emission basis.

Categorically Insignificant Activity

10. CIA-1: The facility includes a 1.2 MMBtu per hour natural gas-fired make-up unit that is considered a categorically insignificant activity under LRAPA title 12.

Nuisance, Deposition and Other Emission Limitations

11. 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.

12. 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.

13. 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

14. The facility is paved. As such, the permit will not include the general requirements for fugitive emissions under LRAPA 48-015.

15. 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.

16. 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.

17. 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.

18. 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)

19. 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.

19.a. The particulate matter emissions from the facility are de minimis. As such, TACT does not apply for particulate matter emissions.

19.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: PB-1 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.

New Source Performance Standards (NSPSs)

20. 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)

21. 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:

21.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.

21.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.

21.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)

22. 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	de minimis	de minimis	NA	25
PM_{10}	NA	0	0	de minimis	de minimis	NA	15
$PM_{2.5}$	NA	0	0	de minimis	de minimis	NA	10
CO	NA	0	0	de minimis	de minimis	NA	100
NO_X	NA	0	0	de minimis	de minimis	NA	40
SO_2	NA	0	0	de minimis	de minimis	NA	40
VOC	NA	0	0	39	30	30	40

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)		
GHG	NA	0	0	de minimis	de minimis	NA	75,000
Individual HAP	NA	NA	NA	9	NA	NA	NA
Aggregate HAPs	NA	NA	NA	24	NA	NA	NA

22.a. The facility does not have a baseline emission rate for PM, PM_{10}, CO, NO_X, SO_2 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.

22.b. The netting basis for all pollutants is 0 (zero) in accordance with LRAPA 42-0046(4).

22.c. In accordance with LRAPA 42-0041(2), the PSELs for VOC are set equal to the source's potential to emit. No PSELs are set for PM, PM_{10}, $PM_{2.5}$, CO, or NO_x, SO_2 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

22.d. The baseline year, netting basis, and SER are not applicable for limiting federal HAPs. The facility does not have 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 removed from the permit.

Unassigned Emissions and Emission Reduction Credits

23. 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)

24. 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

25. 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 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 1.15 tons per year (Xylenes). The potential aggregate of federal HAP emissions are 1.97 tons per year. The facility is considered a natural minor or area source of federal HAPs.

26. Under the Cleaner Air Oregon (CAO) 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 (TAC). 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.

27. 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				
Cumene	98-82-8	0.29	Y	Y
Cobalt 2-Ethylhexanoate	136-52-7	0.00	Y	Y
Ethylbenzene	100-41-4	0.31	Y	Y
2-Propoxyethanol	2807-30-9	0.06	Y	Y
Toluene	108-88-3	0.00	Y	Y
Xylenes	1330-20-7	1.15	Y	Y
Acetone	67-64-1	2.07	N	Y
Barium Sulfate (s)	7440-39-3	3.87	N	Y
t-Butyl Acetate	540-88-5	39.65	N	Y
2-Butoxyethanol	111-76-2	1.91	N	Y
p-Chlorobenzotrifluoride	239	4.55	N	Y
Methyl Ethyl Ketone	78-93-3	0.06	N	Y
1,2,3-Trimethylbenzene	526-73-8	1.23	N	Y
1,2,4-Trimethylbenzene	95-63-6	1.91	N	Y
1,3,5-Trimethylbenzene	108-67-8	1.91	N	Y
Metals				
Chromium (Total)	7440-47-3	4.9E-04	Y	N
Cobalt	7440-48-4	4.9E-04	Y	Y
Manganese	7439-96-5	1.5E-01	Y	Y
Nickel	7440-02-0	4.9E-04	Y	Y

Toxics Release Inventory

28. 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)
Lead	7439-92-1	0.21	--	0.21
Manganese	7439-96-5	21	--	21
Nickel	7440-02-0	4	--	4

Compliance History

29. This facility has not been inspected by LRAPA since the facility was constructed in 2013.

30. LRAPA has not taken any enforcement action against this facility since it was constructed in 2013.

Source Testing History

31. 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

32. 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 material CPDS or SDS	Each coating and solvent	--	Maintain documentation
VOC-containing material usage	Material name and usage	Gallons	Monthly
VOC-containing material usage	Density of material	Pounds per gallon	Each coating and solvent
VOC-containing material usage	VOC content	% by weight	Each coating and solvent
Spray booth filter particulate matter control efficiency	Control efficiency	%	Maintain documentation from each filter manufacturer
Spray booth filter replacement	Occurrence	--	Upon replacement
Spray booth training	Training logs /	--	Maintain

Activity	Parameter	Units	Minimum Recording Frequency
	certifications		documentation of training
Spray coating application technology	Documentation	--	Maintain documentation for each spray gun
General Recordkeeping			
HAP-containing material CPDS or SDS	Each coating and solvent	--	Maintain documentation
HAP-containing material usage	Material name and usage	Gallons	Monthly
HAP-containing material usage	Density of material	Pounds per gallon	Each coating and solvent
HAP-containing material usage	HAP content	% by weight	Each coating and solvent
Welding wire/rod	Usage	Pounds	Annually
Complaints from the public	Log each complaint and the resolution	NA	Upon receipt
Visible Emission Survey	Opacity	See Condition 11	Quarterly
Operation and Maintenance Plan	--	--	Maintain current version on-site
Excess emissions log of all planned and unplanned excess emissions	See Condition G16	NA	Per occurrence

Reporting Requirements

33. 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 Conditions 5 and 6 of the permit, including supporting calculations. The summary must include VOC emission calculations corresponding to each 12-month consecutive period in the previous calendar year.	Annual	February 15
Welding wire/rod 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 excess emissions log required by Condition G16 of the permit, if any planned or unplanned excess emissions have occurred during the reporting period.	Annual	February 15

34. 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

35. 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 was on public notice from August 2, 2024 through September 9, 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
09/10/2024

Emission Detail Sheets:

Carry-On Trailer Corporation - 201313
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)	Individual HAP (TPY)	Aggregate HAP (TPY)
PB-1	Paint Booth	0.31	0.31	0.31	--	--	--	30.3	--	1.15	1.82
Weld	Welding	0.25	0.25	0.25	--	--	--	--	--	0.15	0.16
	PSEL =	de minimis	de minimis	de minimis	de minimis	de minimis	de minimis	30	de minimis	--	--

Compound	CAS Number	PTE (TPY)	HAP	CAO
Organics				
Cumene	98-82-8	0.29	Y	Y
Cobalt 2-Ethylhexanoate	136-52-7	0.00	Y	Y
Ethylbenzene	100-41-4	0.31	Y	Y
2-Propoxyethanol	2807-30-9	0.06	Y	Y
Toluene	108-88-3	0.00	Y	Y
Xylenes	1330-20-7	1.15	Y	Y
Acetone	67-64-1	2.07	N	Y
Barium Sulfate (s)	7440-39-3	3.87	N	Y
t-Butyl Acetate	540-88-5	39.65	N	Y
2-Butoxyethanol	111-76-2	1.91	N	Y
p-Chlorobenzotrifluoride	239	4.55	N	Y
Methyl Ethyl Ketone	78-93-3	0.06	N	Y
1,2,3-Trimethylbenzene	526-73-8	1.23	N	Y
1,2,4-Trimethylbenzene	95-63-6	1.91	N	Y
1,3,5-Trimethylbenzene	108-67-8	1.91	N	Y
Metals				
Chromium (Total)	7440-47-3	4.9E-04	Y	N
Chromium (VI)	18540-29-9	0.0E+00	Y	Y
Cobalt	7440-48-4	4.9E-04	Y	Y
Manganese	7439-96-5	1.5E-01	Y	Y
Nickel	7440-02-0	4.9E-04	Y	Y
Lead	7439-92-1	0.0E+00	Y	Y
	Total PTE (TPY) =		1.97	59
	Max Individual PTE (TPY) =		1.15	

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.

Carry-On Trailer Corporation - 201313
Emission Detail Sheets
Paint Booth Emissions

65%	**= Minimum Coating Transfer Efficiency**
98.0%	**= Minimum Filter PM Removal Efficiency**
4.2	**= Scale Up Factor (8760 / 2080)**

Coating Materials

lor	Description	Code	Density lb/gal	2023 Usage gal/yr	2023 Usage lbs/yr	VOC wt%	Exempt VOC/H2O wt%	Solids wt%	VOC Emissions lbs/yr	PM Emissions lbs/yr
villiams	F75BC0031 Duraspar 440 Black Bip Enamel	AXA1807	8.13	5047	41032.11	29.52%	41.00%	29.48%	12113	85
villiams	E61ACV029 Duraspar Primer Greay Alkyd MSP17	AXA1020	12.45	590	7345.5	3.69%	17.70%	78.61%	271	40
villiams	VOC Exempt Reducing Solvent	YXC1134	7.20	110	792	0.00%	100.00%	0.00%	0	0
villiams	Low HAPS Primer Sealer	354X1875	10.67	430	4588.1	27.09%	7.54%	65.37%	1243	21
villiams	F75BC0030 Duraspar 440 Black Dip Enamel	AXA1809	9.25	40	370	47.75%	10.03%	42.22%	177	1
villiams	n-Butyl Acetate	R6K18	7.31	10	73.1	100.00%	0.00%	0.00%	73	0
villiams	Xylene	154-2398	7.17	20	143.4	100.00%	0.00%	0.00%	143	0
villiams	Krylon COLORmaxx, Gloss Black	5505	6.18	129.49	800.2482	36.08%	50.00%	13.92%	289	1
villiams	NOW Spray Paint, Gloss Black	21213	6.18	36.57	226.0026	36.08%	50.00%	13.92%	82	0
		Total Usage (gal) =		6,413				**2023 Total (TPY) =**	7.20	0.07
								PTE (TPY) =	30.3	0.31

HAP/TAC Emissions

Oregon Toxic Air Contaminants

Federal Hazardous Air Pollutants

lor	Description	Code	Cumene 98-82-8 %	Cumene Emissions	Cobalt 2-Ethylhexanoate 136-52-7 %	Cobalt 2-Ethylhexanoate Emissions	Ethylbenzene 100-41-4 %	Ethylbenzene Emissions	2-Propoxyethanol 2807-30-9 %	2-Propoxyethanol Emissions	Toluene 108-88-3 %	Toluene Emissions	Xylenes 1330-20-7 %	Xylenes Emissions	Acetone 67-64-1 %	Acetone Emissions	Barium Sulfate (s) 7440-39-3 %	Barium Sulfate (s) Emissions	t-Butyl Acetate 540-88-5 %	t-Butyl Acetate Emissions	2-Butoxyethanol 111-76-2 %	2-Butoxyethanol Emissions	p-Chlorobenzotrifluoride 239 %	p-Chlorobenzotrifluoride Emissions	Methyl Ethyl Ketone 78-93-3 %	Methyl Ethyl Ketone Emissions	1,2,3-Trimethylbenzene 526-73-8 %	1,2,3-Trimethylbenzene Emissions	1,2,4-Trimethylbenzene 95-63-6 %	1,2,4-Trimethylbenzene Emissions	3,5-Trimethylbenzer 108-67-8 %	3,5-Trimethylbenzer Emissions
villiams	F75BC0031 Duraspar 440 Black Bip Enamel	AXA1807	0.30%	123.10		0.00	0.30%	123.10		0.00		0.00	1.00%	410.32		0.00		0.00	41.00%	16823.17	2.20%	902.71		0.00		0.00	1.30%	533.42	2.00%	820.64	2.00%	820.64
villiams	E61ACV029 Duraspar Primer Greay Alkyd MSP17	AXA1020		0.00		0.00		0.00		0.00		0.00		0.00	1.70%	124.87	25.00%	1836.38	16.00%	1175.28		0.00	25.00%	1836.38		0.00		0.00		0.00		0.00
villiams	VOC Exempt Reducing Solvent	YXC1134		0.00	0.11%	0.87		0.00		0.00		0.00		0.00		0.00		0.00	100.00%	792.00		0.00		0.00	3.41%	27.01		0.00		0.00		0.00
villiams	Low HAPS Primer Sealer	354X1875	0.31%	14.22		0.00	0.10%	4.59		0.00		0.00	0.30%	13.76	7.54%	345.94		0.00		0.00		0.00	4.45%	204.17		0.00	1.11%	50.93	1.89%	86.72	1.82%	83.50
villiams	F75BC0030 Duraspar 440 Black Dip Enamel	AXA1809		0.00		0.00		0.00		0.00		0.00	0.30%	1.11		0.00		0.00	10.03%	37.11	1.28%	4.74	32.65%	120.81		0.00		0.00		0.00	0.86%	3.18
villiams	n-Butyl Acetate	R6K18		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
villiams	Xylene	154-2398	0.14%	0.20		0.00	15.00%	21.51		0.00	0.14%	0.20	84.72%	121.49		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
villiams	Krylon COLORmaxx, Gloss Black	5505		0.00		0.00		0.00	2.76%	22.09		0.00		0.00	50.00%	400.12		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
villiams	NOW Spray Paint, Gloss Black	21213		0.00		0.00		0.00	2.76%	6.24		0.00		0.00	50.00%	113.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
		2023 Total (TPY) =		6.9E-02		4.4E-04		7.5E-02		1.4E-02		1.0E-04		0.27		0.49		0.92		9.41		4.5E-01		1.08		0.01		2.9E-01		4.5E-01		4.5E-01
		PTE (TPY) =		2.9E-01		1.8E-03		0.31		0.06		4.2E-04		1.15		2.07		3.87		39.65		1.91		4.55		0.06		1.23		1.91		1.91

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%.
Scale up factor based on the actual yearly hours of operation (approximately 2080) ratioed to the maximum number of hours in a year (8760).
Acetone and t-Butyl Acetate are not considered VOC under the definition in Title 12.

Carry-On Trailer Corporation - 201313
Emission Detail Sheets
Welding Emissions

23.132	**= 2023 Usage (1000 lb wire/yr)**
4.2	**= Scale Up Factor (8760 / 2080)**

Criteria Pollutants

Pollutant	Cas No.	2023 Emissions (TPY)	Potential Emissions (TPY)
PM/PM10/PM2.5	--	0.06	0.25

HAP/TAC Emissions

Pollutant	Cas No.	2023 Emissions (TPY)	Potential Emissions (TPY)
Chromium (Total)	7440-47-3	1.2E-04	4.9E-04
Chromium (VI)	18540-29-9	0.0E+00	0.0E+00
Cobalt	7440-48-4	1.2E-04	4.9E-04
Manganese	7439-96-5	3.7E-02	1.5E-01
Nickel	7440-02-0	1.2E-04	4.9E-04
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	E70S	5.2	0.01	ND	0.01	3.18	0.01	ND

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.
Scale up factor based on the actual yearly hours of operation (approximately 2080) ratioed to the maximum number of hours in a year (8760).

Carry-On Trailer Corporation - 201313
Emission Detail Sheets
Categorically Insignificant Activity

Makeup Air Unit Specifications

Max Heat Input	1.2	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	0.01
PM_{10}	2.5	lb/MMcf	0.01
$PM_{2.5}$	2.5	lb/MMcf	0.01
Carbon Monoxide	84	lb/MMcf	0.43
Nitrogen Oxides	100	lb/MMcf	0.51
Sulfur Dioxide	1.7	lb/MMcf	0.01
VOCs	5.5	lb/MMcf	0.03
GHGs (CO_2 equiv.)	117	lb/MMBtu	615

HAP/TAC Emissions

Pollutant	NG Emission Factor (lb/MMcf)	Potential Annual Emissions (TPY)	Federal HAP	CAO Air Toxic
Organics				
Acetaldehyde	4.30E-03	2.2E-05	Yes	Yes
Acrolein	2.70E-03	1.4E-05	Yes	Yes
Benzene	8.00E-03	4.1E-05	Yes	Yes
Ethyl Benzene	9.50E-03	4.9E-05	Yes	Yes
Formaldehyde	1.70E-02	8.7E-05	Yes	Yes
Hexane	6.30E-03	3.2E-05	Yes	Yes
Naphthalene	3.00E-04	1.5E-06	Yes	Yes
POM (inc. PAHs)	1.00E-04	5.1E-07	Yes	Yes
Toluene	3.66E-02	1.9E-04	Yes	Yes
Xylenes	2.72E-02	1.4E-04	Yes	Yes
Inorganic Gases				
Ammonia	3.2000	1.6E-02	No	Yes
Metals				
Arsenic and compounds	2.0E-04	1.0E-06	Yes	Yes
Barium and compounds	4.4E-03	2.3E-05	No	Yes
Beryllium and compounds	1.2E-05	6.1E-08	Yes	Yes
Cadmium and compounds	1.1E-03	5.6E-06	Yes	Yes
Chromium, Hexavalent	1.4E-03	7.2E-06	Yes	Yes
Cobalt and compounds	8.4E-05	4.3E-07	Yes	Yes
Copper and compounds	8.5E-04	4.4E-06	No	Yes
Lead and compounds	5.0E-04	2.6E-06	Yes	No
Manganese and compounds	3.8E-04	1.9E-06	Yes	Yes
Mercury and compounds	2.6E-04	1.3E-06	Yes	Yes
Molybdenum Trioxide	1.7E-03	8.5E-06	No	Yes
Nickel compounds, insoluble	2.1E-03	1.1E-05	Yes	Yes
Selenium and compounds	2.4E-05	1.2E-07	Yes	Yes
Vanadium (fume or dust)	2.3E-03	1.2E-05	No	Yes
Zinc and compounds	2.9E-02	1.5E-04	No	Yes
	Total Emissions =	1.7E-02	6.0E-04	1.7E-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_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.