



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

**Review Report**

**Forrest Paint Company**  
1011/990 McKinley Street  
Eugene, Oregon 97402  
Website: <https://www.forrestpaint.com/>

**Permit No. 202805**

**Source Information:**

Primary SIC	2851 – Paints, Varnishes, Lacquers, Enamels, and Allied Products
Secondary SIC	--
Primary NAICS	325510 – Paint and Coating Manufacturing
Secondary NAICS	--
Source Categories	B.81: Paint and allied

(LRAPA title 37, Table 1)	products manufacturing subject to an area source NESHAP under title 44 C.3: All sources electing to maintain the source's netting basis.
Public Notice Category	III

**Compliance and Emissions Monitoring Requirements:**

Unassigned Emissions	Y
Emission Credits	N
Compliance Schedule	N
Source Test [date(s)]	Y, [varies; see permit]

COMS	N
CEMS	N
Ambient monitoring	N

**Reporting Requirements**

Annual Report (due date)	February 15
Semi-Annual Report (due date)	N
GHG Report (due date)	If applicable
Monthly Report (due date)	N

Quarterly Report (due date)	N
Excess Emissions Report	Y
Other Reports:	
NESHAP 7C Deviation	If applicable

**Air Programs**

NSPS (list subparts)	N
NESHAP (list subparts)	A, CCCCCCC
CAM	N
Regional Haze (RH)	N
Synthetic Minor (SM)	N
SM-80	Y
Title V	N
Part 68 Risk Management	N
ACDP (SIP)	N
Major FHAP Source	N
Federal Major Source	N
NA New Source Review (NSR)	N
Prevention of Significant Deterioration (PSD)	N
Acid Rain	N

Clean Air Mercury Rule (CAMR)	N
TACT	N
>20 Megawatts	N
Cleaner Air Oregon	N

Permittee Identification

1. Forrest Paint Company (“the facility” or “Forrest Paint”) operates a coating manufacturing facility at 990 and 1011 McKinley Street in Eugene, Oregon.

General Background

2. Forrest Paint Company manufactures solvent-based paint, latex coatings, powder coatings, high temperature coatings, cleaners, polishes, gaskets and sealants, wood restoration products, and skid-resistant epoxy paint related products. Low-VOC coatings produced at the facility include ultraviolet (UV) cured coatings, water reducible paint, high solids paint, and water-based paint. Aerosol paint is a specialty product manufactured at the facility. Solvent-based paint manufacturing accounts for approximately three-quarters of the total paint production.

Reasons for Permit Action and Fee Basis

3. This permit action is a renewal for an existing Standard Air Contaminant Discharge Permit (Standard ACDP) which was issued on December 22, 2017 and expired on December 22, 2022. As the facility submitted a timely renewal application on June 23, 2022, the current permit will remain in effect until final action has been taken on the renewal application. The renewed Standard ACDP will be valid for up to five (5) years.

Attainment Status

4. The facility is located inside the Eugene-Springfield Air Quality Management Area. The facility is located in an area that has been designated attainment/unclassified for PM<sub>2.5</sub>, ozone (VOC), NO<sub>2</sub>, SO<sub>2</sub>, and Pb and a maintenance area for CO and PM<sub>10</sub>. The facility is located within 100 kilometers of two (2) Class I air quality protection areas: Diamond Peak Wilderness and Three Sisters Wilderness area.

Permitting History

5. LRAPA has reviewed and issued the following permitting actions to this facility:

Date Approved/Valid	Permit Action Type	Description
05/01/1992-04/30/1997	ACDP	Initial permit
July 1992	ACDP Modification	PSEL adjustment
01/14/2000-01/13/2005	Title V	Initial Title V permit
08/19/2002-01/13/2005	Minor Modification	Modify baghouse pressure drop ranges
09/16/2003-09/15/2008	SM ACDP	Synthetic minor ACDP
07/13/2010-07/13/2015	Standard ACDP	Renewal
10/13/2015	Non-NSR/PSD BTM	Installation of a powder coating extruder and grinder with baghouse
12/22/2017-12/22/2022	Standard ACDP	Renewal
Upon Issuance	Standard ACDP	Renewal

Emission Unit Descriptions

6. The emission units regulated by the permit are the following:

EU ID	Emission Unit Description	PCD ID	Pollution Control Device Description
EU1	Storage Tanks	None	None
EU2	Fugitive Valves & Pumps	None	None
EU3	FireSnake / FireStarter	None	None
EU4	Tank Wash	BF	Biofilter
EU6	Tinter’s Spray Booth	None	None

EU ID	Emission Unit Description	PCD ID	Pollution Control Device Description
EU7	Solvent Still	BF	Biofilter
EU8	Aerosol Fill Room, Gassing Room and Waste Can Puncturing (Vents 11 &12)	CF	Carbon Filter for Can Puncturing
EU9	Solvent-based Paint Manufacturing	SB-A, SB-B, SB-N, BF	Shaker Baghouses and Biofilter
EU10	Paint Making Department Clean-Up	BF	Biofilter
EU11	Stainless Steel Twins Cleaning	BF	Biofilter
EU12	Water-Based Paint Manufacturing	JP-4	Jet Pulse Baghouse
EU13	Air Classifying Grinders (W, I, H, A)	JP-1, JP-2, JP-5, JP-8	Jet Pulse Baghouses
EU15	General Extraction, Extruder, Grinder Area	JP-3	Jet Pulse Baghouse
EU17	Powder Lab Extruder and Grinder, Production Spray Room, General Area Extraction	JP-6	Jet Pulse Baghouse
<b>Categorically Insignificant Activities</b>			
CIA5	Laboratory	None	None
CIA14	0.7 MMBtu per hour Natural Gas-Fired Columbia Steam Boiler	None	None

7. The following changes have been made to the Emission Unit Description table as compared to the table in the current permit:
  - 7.a. Emission Unit EU3 has been renamed from "81T0000 Solvent Canning" to "FireSnake / FireStarter." According to the facility this name best represents this operation.
  - 7.b. Emission Unit EU15 has been renamed from "Extruder and Grinder" to "General Extraction, Extruder, Grinder Area" to better represent this operation.
  - 7.c. Emission Unit EU16 has been merged into Emission Unit EU17.
  - 7.d. A number of control device names have been added or corrected. In addition jet pulse baghouse JP-7 is still at the facility, but not in service.

General Emission Limitations

8. 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 for a period or periods aggregating more than three (3) minutes in any one (1) hour. Compliance will be demonstrated through a monthly visible emissions survey, annual inspection requirements for baghouses, and implementation of an Operation & Maintenance Plan for baghouses.
9. 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):
  - 9.a. For sources installed, constructed, or modified on or after June 1, 1970 but prior to April 16, 2015 for which there are not representative compliance source test results, the particulate matter emission limit is 0.14 grains per dry standard cubic foot; and
  - 9.b. For sources installed, constructed, or modified after April 16, 2015, the particulate matter emission limit is 0.10 grains per dry standard cubic foot.
 Compliance will be demonstrated through a monthly visible emissions survey, annual inspection requirements for baghouses, and implementation of an Operation & Maintenance Plan for baghouses.
10. The particulate matter emitting processes at this facility are 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 will be demonstrated through a monthly visible emissions survey, annual inspection requirements for baghouses, and implementation of an Operation & Maintenance Plan for baghouses.

11. Under LRAPA 32-007(1), the facility is required to prepare an Operation and Maintenance Plan (O&M Plan) for the particulate matter control devices that exhaust to the atmosphere. If the O&M Plan is updated, the facility must submit the updated copy to LRAPA for review. If LRAPA determines the plan is deficient, LRAPA may require the facility to amend the plan. In addition, at least annually, the permittee is required to inspect each baghouse exhausting to the atmosphere and maintain a log of the inspection and any actions taken.
12. Under LRAPA 32-007(1), the facility is required to prepare an Operation and Maintenance Plan (O&M Plan) for the biofilter that controls VOC and federal HAP emissions. If the O&M Plan is updated, the facility must submit the updated copy to LRAPA for review. If LRAPA determines the plan is deficient, LRAPA may require the facility to amend the plan. In addition, the permittee is required to develop parametric monitoring ranges within 180 days of permit issuance for pressure drop across the biofilter bed and biofilter bed temperature at the biofilter outlet. The permittee will be required to monitor and record these values at least once every day the facility is operating. Any deviation from the approved parametric monitoring ranges triggers an investigation and reporting requirement. At least annually, the permittee is required to inspect the biofilter and maintain a log of the inspection and any actions taken.
13. Under LRAPA 35-0120, the facility is required to perform a number of tests related to VOC and federal HAP emissions from the paint manufacturing area, including:
  - 13.a. At least annually, the permittee is required to determine the total VOC removal efficiency of the biofilter;
  - 13.b. At least quinquennially, the permittee is required to verify the percent of VOC emissions that are passing through the roof vent(s) and the inlet to the biofilter;
  - 13.c. If the permittee intends to add or replace media biofilter media, the permittee will be required to provide LRAPA with a written notification and a requirement to test the total VOC removal efficiency of the biofilter at the discretion of LRAPA;

#### Typically Achievable Control Technology (TACT)

14. LRAPA 32-008(1) requires an existing unit a facility to 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.
15. LRAPA 32-008(2) requires new or modified emission units to meet TACT if the emission unit meets the following criteria: The emission unit is not subject to Major NSR or Type A State NSR in LRAPA title 38, and applicable NSPS in LRAPA title 46, or any other standard applicable to only new or modified sources in LRAPA title 32, title 33, or title 39 for the regulated pollutant; 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.

16. None of the particulate matter emitting emission units at this facility exceed either the existing or new/modified emission unit thresholds of five (5) tons per year or one (1) ton per year, respectively. The particulate matter emissions from these emission units are not subject to TACT.
17. The emission units that contribute to the paint manufacturing area emit more than the existing or new/modified emission unit thresholds of ten (10) tons per years and one (1) ton per year, respectively. The paint manufacturing area primarily exhausts through a biofilter. While a formal TACT determination has not been conducted, LRAPA has determined that the use of the biofilter to control VOC and federal HAP emissions likely meets the TACT requirements for this facility.

Plant Site Emission Limits (PSELS)

18. Provided below is a summary of the baseline emissions rate, netting basis, plant site emission limit, and potential-to-emit:

Pollutant	Baseline Emission Rate (TPY)	Netting Basis		Plant Site Emission Limit (PSEL)		PTE (TPY)
		Previous (TPY)	Proposed (TPY)	Previous PSEL (TPY)	Proposed PSEL (TPY)	
PM	3.3	3.3	3.3	NA	NA	0.57
PM <sub>10</sub>	3.3	3.3	3.3	NA	NA	0.57
PM <sub>2.5</sub>	NA	3.3	3.3	NA	NA	0.56
CO	NA	NA	0	NA	NA	--
NO <sub>x</sub>	NA	NA	0	NA	NA	--
SO <sub>2</sub>	NA	NA	0	NA	NA	--
VOC	60.4	60	60	58	58	58
GHG (as CO <sub>2</sub> e)	163	163	163	NA	NA	--
Individual HAP	NA	NA	NA	9	9	9
Total HAP	NA	NA	NA	24	24	24

- 18.a. The facility baseline emission rate for PM, PM<sub>10</sub>, and VOC were established in the Title V permit issued on 08/19/2002. No baseline emission rate has been set for CO, NO<sub>x</sub> and SO<sub>2</sub>. A baseline emission rate is not established for PM<sub>2.5</sub> in accordance with LRAPA 42-0048(3).
- 18.b. For GHGs, the baseline emission rate is any consecutive 12 calendar month period during calendar years 2000 through 2010. A baseline emission rate for GHGs was set under the ACDP issued on 12/22/2017 supposedly using calendar 2007 GHG emissions. However, this GHG baseline appears to be significantly undercounting GHG emissions as compared to the oldest GHG reports from 2013. The GHG baseline should be reanalyzed if the facility needs to establish a PSEL for GHGs.
- 18.c. The netting basis for PM, PM<sub>10</sub>, VOC, and GHGs are the same as the baseline emission rates. As allowed under LRAPA 42-0046(2)(b), the netting basis for PM<sub>2.5</sub> assumes that the PM<sub>2.5</sub> fraction of the PM<sub>10</sub> netting basis in effect on May 1, 2011 is 100%. The netting basis for CO, NO<sub>x</sub>, or SO<sub>2</sub> have been set at zero because these pollutants do not have a baseline emission rate.
- 18.d. The PSELS for the facility were previously set under the ACDP issued on 12/22/2017 and have not been revised under this renewal.
- 18.e. No PSELS are set for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, CO, SO<sub>2</sub> 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.

- 18.f. The potential emissions for PM, PM<sub>10</sub>, and PM<sub>2.5</sub> are from the emission detail sheets attached to this review report. The VOC and HAP potential emissions are based on the proposed PSEL. No potential emissions are listed for CO, NO<sub>x</sub>, SO<sub>2</sub>, and GHGs, as these emissions have not been quantified because they result only from Categorically Insignificant Activities.
- 18.g. The baseline year, netting basis, and SER are not applicable for federal HAPs. The PSELs for individual federal HAPs and aggregate federal HAPs of 9 TPY and 24 TPY, respectively, were established under previous ACDPs and have not been revised under this renewal. The facility does have a capacity for federal HAPs that exceeds the major source thresholds for individual federal HAPs and aggregate federal HAPs of 10 TPY and 25 TPY, respectively. The HAP PSEL limits restrict the facility to less than major source thresholds.

PSEL Compliance

- 19. Historically, the facility has used a number of methods to determine the amount of VOC and volatile HAPs emitted to the atmosphere from the paint manufacturing process. Under the existing permit, the facility assumes 0.6% of the total VOC usage is emitted directly to atmosphere and 1.7% of the total VOC usage is emitted in paint manufacturing and partially controlled by the biofilter control system. Of the portion occurring in paint manufacturing, 74.3% passes into the biofilter control system and 25.7% is emitted to atmosphere uncontrolled through roof vent(s).
- 20. The facility conducted testing in August and December of 2022 that indicates these original assumptions are no longer valid. In consultation with LRAPA, the facility will assume 0.3% of the total VOC usage is emitted directly to atmosphere uncontrolled. This assumption is based on calculations submitted on December 18, 2009 in support of the Standard ACDP issued on July 13, 2010. A reexamination of these calculations indicates that 0.24% of the total VOC usage for calendar 2008 is lost from sources that do not occur in paint manufacturing and are partially controlled by the biofilter control system. This percentage has been conservatively set at 0.3%. For paint manufacturing, the facility proposes to conservatively use the 2% solvent loss factor for well-controlled paint manufacturing conditions referenced in US EPA AP-42, Section 6.4.1 - Paint and Varnish based on the testing results from August and December of 2022. Additionally, this testing estimated that 93.1% of VOCs emitted in paint manufacturing pass into the biofilter control system and the other 6.9% of VOCs exit uncontrolled through roof vent(s). Similar to previous permits, the control efficiency of the biofilter will be based on performance testing. The draft permit uses this new approach to determining PSEL compliance for VOCs and HAPs.

Significant Emission Rate

- 21. None of the pollutants listed below have a PSEL increase over the netting basis that exceeds the Significant Emission Rate (SER) as defined in LRAPA title 12.

Pollutant	Proposed PSEL (TPY)	PSEL Increase Over Netting Basis (TPY)	PSEL Increase Due to Utilizing Existing Baseline Period Capacity (TPY)	PSEL Increase Due to Modification (TPY)	SER (TPY)
PM	NA	NA	NA	NA	25
PM <sub>10</sub>	NA	NA	NA	NA	15
PM <sub>2.5</sub>	NA	NA	NA	NA	10
CO	NA	NA	NA	NA	100
NO <sub>x</sub>	NA	NA	NA	NA	40
SO <sub>2</sub>	NA	NA	NA	NA	40
VOC	58	0	0	0	40
GHGs	NA	NA	NA	NA	75,000

Unassigned Emissions and Emission Reduction Credits

22. The facility has unassigned emissions as shown in the table below. 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. In accordance with LRAPA 42-0055 the maximum unassigned emissions may not be more than the SER.

<b>Pollutant</b>	<b>Proposed Netting Basis (TPY)</b>	<b>Unassigned Emissions (TPY)</b>	<b>Emission Reduction Credits (TPY)</b>	<b>SER (TPY)</b>
PM	NA	NA	NA	25
PM <sub>10</sub>	NA	NA	NA	15
PM <sub>2.5</sub>	NA	NA	NA	10
CO	NA	NA	NA	100
NO <sub>x</sub>	NA	NA	NA	40
SO <sub>2</sub>	NA	NA	NA	40
VOC	58	2	0	40
GHGs	NA	NA	NA	75,000

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

23. This source is located in an area that is designated attainment or unclassified for all regulated pollutants other than CO and PM<sub>10</sub>. For pollutants other than CO and PM<sub>10</sub>, the proposed PSELS are less than the federal major source threshold of 250 TPY per regulated pollutant for an unlisted source and are not subject to Major NSR. For CO and PM<sub>10</sub>, the source is located in a maintenance area. The facility has no PSELS for CO and PM<sub>10</sub>. Thus CO and PM<sub>10</sub> emissions from the facility are less than the 100 TPY threshold that determines the applicability of Major NSR.

Federal Hazardous Air Pollutants/Toxic Air Contaminants

24. Forrest Paint is currently a synthetic minor or area source of federal HAPs because the facility has specific federal HAP limitations that restrict the emissions of any individual federal HAP to no more than 9 TPY and the emissions of the aggregate of all federal HAPs to no more than 24 TPY.

25. 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 rule. All federal HAPs are on the list of approximately 600 toxic air contaminants. The federal HAPs and toxic air contaminants listed below are based upon source testing and standard emission factors for the types of emission units at this facility. 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.

26. Provided below is a summary of the significant federal HAPs which may also be CAO TAC emissions. With the exception of xylene and toluene, the potential emissions of the individual compounds listed below are based on their individual 2022 usage adjusted by the production factor of 4.2 shown in the emission detail sheets, converted to emissions using the loss factor of 2.3%, and adjusted by the ratio of the VOC PSEL to the VOC capacity. For xylenes and toluene, the potential emissions are based on the highest usage occurring in years 2018 through 2022, adjusted by the production factor of 4.2 shown in the emission detail sheets, converted to emissions using the loss factor of 2.3%, and adjusted by the ratio of the VOC PSEL to the VOC

capacity. Based on this methodology, the highest potential emission for an individual HAP is xylenes at 8.9 TPY. The potential emissions in aggregate of all federal HAPs is 18.6 TPY.

Pollutant	CAS Number	Potential Emissions (TPY)	Federal HAP	CAO Air Toxic
<b>Organics</b>				
2-(2-Phenoxyethoxy)ethanol	104-68-7	2.4E-04	Yes	No
2,4-Toluene diisocyanate	584-84-9	5.7E-05	Yes	Yes
2-Butoxyethanol	111-76-2	0.63	No	Yes
2-Phenoxyethanol	122-99-6	1.9E-03	Yes	No
Benzene	71-43-2	5.8E-03	Yes	Yes
Cumene	98-82-8	5.2E-03	Yes	Yes
Dipropylene glycol methyl ether	34590-94-8	4.7E-02	No	Yes
Ethylbenzene	100-41-4	1.7	Yes	Yes
Ethylene glycol	107-21-1	1.6E-02	Yes	Yes
Formaldehyde	50-00-0	2.6E-03	Yes	Yes
Glycol ether DB	112-34-5	1.3E-02	Yes	Yes
Glycol ether DEGHE	112-59-4	8.0E-03	Yes	No
Glycol ether DM	111-77-3	4.6E-03	Yes	Yes
Glycol ether PM	107-98-2	4.9E-03	No	Yes
Hexamethylene diisocyanate	822-06-0	2.5E-04	Yes	Yes
Methanol	67-56-1	9.3E-03	Yes	Yes
Methyl isobutyl ketone	108-10-1	0.10	Yes	Yes
Methyl methacrylate	80-62-6	4.5E-03	Yes	Yes
Polyethylene glycol	57-55-6	2.3E-03	No	No
Styrene	100-42-5	2.1E-03	Yes	Yes
Toluene	108-88-3	7.8	Yes	Yes
Xylenes	1330-20-7	8.9	Yes	Yes

New Source Performance Standards (NSPS)

27. 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)

*40 CFR Part 63 subpart CCCCCC (7C) – National Emission Standards for Hazardous Air Pollutants for Area Sources: Paints and Allied Products Manufacturing*

28. This regulation applies to facilities that perform paint and allied manufacturing that are area sources of federal hazardous air pollutant emissions and process, use, or generate materials containing federal HAP. Paints and allied product manufacturing means the production of paints and allied products, the intended use of which is to leave a dried film of solid material on a substrate. Paints and allied products manufacturing does not include the manufacture of products that do not leave a dried film of solid material on the substrate, such as thinners, paint removers, brush cleaners, and mold release agents or the manufacture of raw materials, such as resins, pigments, and solvents used in the production of paints and coatings. Under 40 CFR 63.11607, materials containing federal HAPs means a material containing benzene, methylene chloride, or compounds of cadmium, chromium, lead, and/or nickel, in amounts greater than or equal to 0.1 percent by weight for carcinogens, or 1.0 percent by weight for non-carcinogens, as shown in formulation data provided by the manufacturer or supplier.



29. The 40 CFR 63 subpart 7C requirements that are applicable to this facility are identified in the following table:

40 CFR 63 subpart 7C Citation	Description	Applicable to Source (Yes/No)	Comments	Permit Condition
63.11599	Applicability	Yes	This facility is an existing affected source.	NA
63.11600	Compliance Dates	Yes	An existing affected source was required to achieve compliance by December 3, 2012.	NA
63.11601	Standards for new and existing paints and allied products manufacturing facilities	Yes	None	24
63.11602	Performance test and compliance requirements for new and existing sources	Yes	None	25
63.11603	Notification, reporting, and recordkeeping requirements	Yes	None	26
63.11604	Reserved	No	None	NA
63.11605	General Provisions	Yes	None	NA
63.11606	Implementation and enforcement	Yes	None	NA
63.11607	Definitions	Yes	None	NA
63.11608 – 63.11618	Reserved	No	None	NA

Toxic Release Inventory

30. The Toxics Release Inventory (TRI) is 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 2021, this facility reported the emissions of the following chemicals:

Chemical Name	CAS Number	Fugitive Release (pounds)	Stack Release (pounds)	Total (pounds)
n-Butyl Alcohol	71-36-3	1,997	2,979	4,976
Ethylbenzene	100-41-4	723	596	1,319
Methyl iso-Butyl Ketone	108-10-1	65	96	161
Toluene	108-88-3	4,358	5,935	10,293
Xylenes	1330-20-7	3,414	6,042	9,456
Glycol Ethers	--	45	67	112
Cobalt Compounds	7440-48-4	Form A only – No values required		
Copper Compounds	7440-50-8	Form A only – No values required		
Manganese Compounds	7439-96-5	Form A only – No values required		
Zinc Compounds	7440-66-6	Form A only – No values required		
Chromium Compounds	7440-47-3	Form A only – No values required		

Compliance History

31. This facility is regularly inspected by LRAPA and occasionally by other regulatory agencies. The following table indicates the inspection history of this facility since 1993:

Type of Inspection	Date	Results
LRAPA - Full Compliance Evaluation	11/18/1993	In compliance
LRAPA - Full Compliance Evaluation	08/26/1994	In compliance
LRAPA - Full Compliance Evaluation	05/16/1995	In compliance
LRAPA - Full Compliance Evaluation	08/22/1996	In compliance
LRAPA - Full Compliance Evaluation	04/15/1998	In compliance
LRAPA - Full Compliance Evaluation	07/26/1999	In compliance
LRAPA - Full Compliance Evaluation	08/29/2000	In compliance
LRAPA - Full Compliance Evaluation	07/10/2001	In compliance
LRAPA - Full Compliance Evaluation	09/29/2003	In compliance
LRAPA - Full Compliance Evaluation	09/30/2004	On schedule
LRAPA - Full Compliance Evaluation	01/22/2011	Not in compliance (NON 3270)
LRAPA - Full Compliance Evaluation	09/21/2016	Not in compliance (NON 3645)
LRAPA - Full Compliance Evaluation	04/21/2021	In compliance

32. LRAPA has issued the following violation notices and/or taken the following enforcement actions against this facility:
- 32.a. Notice of Non-Compliance No. 1079 was issued June 22, 1995. The permit violation was for installing and operating a new powder coating emission unit and baghouse control device without first notifying LRAPA in writing and obtaining approval. The facility was required to complete and submit a "Request for Construction Review of an Air Pollution Control Facility in Lane County" as the prescribed corrective active. The construction review was received on June 23, 1995 and no further enforcement action was taken.
  - 32.b. Notice of Non-Compliance No. 2886 was issued September 14, 2006 for exceeding 9 tons per year single Hazardous Air Pollutant (HAP) emission limit for the 12-month periods of May 2005 to April 2006, June 2005 to May 2006, and July 2005 to June 2006. Toluene was the single HAP for which the exceedance occurred. Notice of Violation No. 06-2886 was issued to the facility on January 18, 2007 including a total civil penalty in the amount of \$6,000. On February 8, 2007, the facility paid the full amount of the civil penalty and the case was closed.
  - 32.c. Notice of Non-Compliance No. 3270 was issued February 25, 2011 for failing to comply with the Monitoring, Record-Keeping and Reporting requirements detailed in the permit.

- The facility failed to conduct leak inspections of solvent storage and transfer, as well as, failing to conduct and record baghouse inspections and failing to operate baghouses within parameter action levels detailed in the O&M Plan. The facility was also notified of a failure to submit both the O&M Plan and the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart CCCCCC “Initial Notification of Applicability” in a timely manner. Notice of Violation No. 11-3270 was issued to the facility on March 14, 2011 and included a total civil penalty in the amount of \$2,400. The facility requested a reduction of civil penalty on April 1, 2011. On April 11, 2011, LRAPA reduced the civil penalty to \$1,500, the penalty was paid by the facility on April 19, 2011, and the case was closed.
- 32.d. Notice of Non-Compliance No. 3645 was issued July 11, 2016 for failing to perform source testing of the facility’s biofilter during the permit term of July 13, 2010 to July 13, 2015. The facility completed the source tests, outside of the previous permitting term, during the weeks of February 2, 2016 and July 25, 2016. The appropriate documentation of the source test plan and report were received in timely manner. Utilizing the results from aforementioned source test, the HAP emission factors for the biofilter were verified and no HAP emission violation was identified. Notice of Violation No.16-3645 was issued to the facility on August 30, 2016 for failure to perform the biofilter source tests during the permit term and included a total civil penalty of \$6,000. On September 8, 2016, LRAPA received the payment of the full amount of the civil penalty and the case was closed.
- 32.e. Notice of Non-Compliance 3860 was issued on June 22, 2022 for failing to operate and maintain the air contaminant collection unit, biofilter, in a manner which minimizes air contaminant discharges and failure to update the biofilter Operation and Maintenance (O&M) plan. This NON has not been resolved as of the date of preparation of this review report.

Performance Test Results

33. The facility is required to perform source testing on the Biofilter. In previous permits, the facility was required to conduct two (2) biofilter source tests during the permit term, including one within the months of June, July or August and the other within the months of December, January or February. Results from Biofilter source tests from 2004 to 2016 are included in the attachment to this review report. In the draft permit, the facility will be required to conduct a biofilter source test annually for total VOC removal efficiency. The permittee has the option to conduct speciated HAP removal efficiency testing in addition to the total VOC removal efficiency. In addition, the permittee will be required to perform EPA Method 204E at least once every 5 years in order to determine the percentages of VOC passing through the roof vent(s) versus entering the biofilter control system. If the permittee intends to add or replace biofilter media, LRAPA may require the facility to conduct additional total VOC removal efficiency testing.

Recordkeeping Requirements

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

Activity	Units	Minimum Recording Frequency
<b>PSEL Recordkeeping</b>		
LRARM production data for VOCs and HAPs	Pounds	Monthly
Biofilter uptime and downtime	Hours	Monthly
Coating manufacturing operations	Hours	Monthly
<b>General Emission Limitation Recordkeeping</b>		
Visible Emissions Survey (VES) log	NA	Monthly
Corrective actions resulting from the VES, as applicable	NA	Per occurrence
Modified EPA Method 9 readings, as applicable	NA	Per occurrence

Activity	Units	Minimum Recording Frequency
Paint manufacturing inspection log	NA	Weekly
Solvent storage and transfer (SS&T) inspection log	NA	Monthly
SS&T time to repair or replace documentation	NA	Per occurrence
<b>Operation and Maintenance Plan Recordkeeping</b>		
Baghouse O&M Plan	NA	Maintain current version
Baghouse inspections log	NA	Annually
Biofilter O&M Plan	NA	Maintain current version
Biofilter parametric monitoring operating ranges request	NA	One time
Records of biofilter parametric monitoring parameters	NA	Daily
Biofilter parametric monitoring device calibration records	NA	In accordance with the O&M plan
Biofilter inspection log	NA	Annually
<b>Testing Recordkeeping</b>		
Each total VOC removal efficiency source test report	NA	Annually
Each RV/BV exhaust percentage report	NA	Quinquennially
Biofilter media addition or replacement notifications	NA	Each event
<b>NESHAP CCCCCC (7C) Recordkeeping</b>		
Initial notification for NESHAP 7C	NA	One time
Annual Compliance Certification Report	NA	Annually
Deviation Report	NA	Annually
Records of all inspections and tests required under NESHAP 7C	NA	Per occurrence
<b>General Recordkeeping</b>		
Complaints from the public	Log each complaint and the resolution	NA
Upset log of all planned and unplanned excess emissions	See Condition G15	NA

**Reporting Requirements**

35. The facility must submit to LRAPA the following reports by the dates indicated in the table below:

Report	Reporting Period	Due Date
Annual emissions as calculated according to Condition 5, including the supporting process parameter and emission factor information.	Annual	February 15
NESHAP 7C: Annual Compliance Certification Report, if applicable	Annual	February 15
NESHAP 7C: Deviation Report, if applicable	Annual	February 15
The upset log information required by Condition G.13, if required by G.13.	Annual	February 15
GHG Report, if required by Condition 29.	Annual	March 31

36. The facility is required to submit an annual report to LRAPA by February 15 of each year this permit is in effect. The annual compliance report must include emissions calculations, recordkeeping requirements, and any entries in the upset log as required by permit Condition G15

Public Notice

37. Pursuant to LRAPA 37-0066(4)(a)(A), issuance of renewed Standard Air Contaminant Discharge Permit requires public notice in accordance with 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 draft permit was on public notice June 23, 2023 to July 28, 2023. No written comments were submitted during the 35-day comment period.

JJW/cmw  
08/09/2023

Forrest Paint 202805									
Emission Detail Sheets									
Facility Emissions									
Criteria Pollutant Emissions									
Pollutant	Original Baseline (TPY)	Previous Netting Basis (TPY)	Proposed Netting Basis (TPY)	Previous PSEL (TPY)	Proposed PSEL (TPY)	Unassigned Emissions (TPY)	PSEL Increase Over Netting Basis (TPY)	PTE (TPY)	SER (TPY)
PM	3.3	3.3	3.3	de minimis	de minimis	NA	NA	0.57	25
PM <sub>10</sub>	3.3	3.3	3.3	de minimis	de minimis	NA	NA	0.57	15
PM <sub>2.5</sub>	NA	3.3	3.3	de minimis	de minimis	NA	NA	0.56	10
CO	0	0	0	de minimis	de minimis	NA	NA	--	100
NO <sub>x</sub>	0	0	0	de minimis	de minimis	NA	NA	--	40
SO <sub>2</sub>	0	0	0	de minimis	de minimis	NA	NA	--	40
VOC	60.4	60.4	60.4	58	58	2	0	58	40
GHG (CO2 eq.)	163	163	163	de minimis	de minimis	NA	NA	--	75,000
Compound	CAS Number	PTE (TPY)	HAP	CAO					
<b>Organics</b>									
2-(2-Phenoxyethoxy)ethanol	104-68-7	2.4E-04	Yes	No					
2,4-Toluene diisocyanate	584-84-9	5.7E-05	Yes	Yes					
2-Butoxyethanol	111-76-2	0.63	No	Yes					
2-Phenoxyethanol	122-99-6	1.9E-03	Yes	No					
Benzene	71-43-2	5.8E-03	Yes	Yes					
Cumene	98-82-8	5.2E-03	Yes	Yes					
ipropylene glycol methyl ether	34590-94-8	4.7E-02	No	Yes					
Ethylbenzene	100-41-4	1.72	Yes	Yes					
Ethylene glycol	107-21-1	1.6E-02	Yes	Yes					
Formaldehyde	50-00-0	2.6E-03	Yes	Yes					
Glycol ether DB	112-34-5	1.3E-02	Yes	Yes					
Glycol ether DEGHE	112-59-4	8.0E-03	Yes	No					
Glycol ether DM	111-77-3	4.6E-03	Yes	Yes					
Glycol ether PM	107-98-2	4.9E-03	No	Yes					
Hexamethylene diisocyanate	822-06-0	2.5E-04	Yes	Yes					
Methanol	67-56-1	9.3E-03	Yes	Yes					
Methyl isobutyl ketone	108-10-1	0.10	Yes	Yes					
Methyl methacrylate	80-62-6	4.5E-03	Yes	Yes					
Polyethylene glycol	57-55-6	2.3E-03	No	No					
Styrene	100-42-5	2.1E-03	Yes	Yes					
Toluene	108-88-3	7.82	Yes	Yes					
Xylenes	1330-20-7	8.94	Yes	Yes					
<b>Aggregate Adjusted PTE (TPY) =</b>			18.6	19					
<b>Max Individual Adjusted PTE (TPY) =</b>			9						
<b>Note:</b>									
PSEL analysis only for units that are not categorically insignificant activities.									
HAP/CAO organic emission totals have been adjusted by the ratio of the 58 TPY VOC PSEL to the 244 TPY VOC PTE.									
Facility has requested to retain the limit on federal HAPs of 9 TPY for each individual HAP and 24 TPY for the aggregate of the HAPs.									
Represents the significant federal HAPs. Does not include all state TACs.									

<b>Forrest Paint 202805</b>						
<b>Emission Detail Sheets</b>						
<b>VOC/HAP Emissions</b>						
	<b>Scale Factor =</b>	<b>4.2</b>				
	<b>Uncontrolled Loss Factor =</b>	<b>2.3%</b>				

<b>2018-2022 Max Usage</b>						
<b>Material</b>	<b>CAS Number</b>	<b>Usage Lbs/Year</b>	<b>Capacity TPY</b>	<b>PTE TPY</b>	<b>HAP</b>	<b>CAO</b>
LRARM	--	9,316,590	450	--		
VOC	--	5,051,690	244	58	<b>HAP</b>	<b>CAO</b>
Toluene	108-88-3	680,792	32.9	7.8	Yes	Yes
Xylene	1330-20-7	778,430	37.6	8.9	Yes	Yes

<b>2022 Usage</b>						
<b>Material</b>	<b>CAS Number</b>	<b>Usage Lbs/Year</b>	<b>Capacity TPY</b>	<b>PTE TPY</b>	<b>HAP</b>	<b>CAO</b>
2-(2-phenoxyethoxy)ethanol	104-68-7	21	1.0E-03	2.4E-04	Yes	No
2-Butoxyethanol	111-76-2	55,260	2.67	0.63	No	Yes
2-Phenoxyethanol	122-99-6	168	8.1E-03	1.9E-03	Yes	No
Benzene	71-43-2	508	2.5E-02	5.8E-03	Yes	Yes
Cumene	98-82-8	452	2.2E-02	5.2E-03	Yes	Yes
Dipropylene Glycol Methyl Ether	34590-94-8	4,099	2.0E-01	4.7E-02	No	Yes
Ethylbenzene	100-41-4	149,484	7.22	1.72	Yes	Yes
Ethylene Glycol	107-21-1	1,393	6.7E-02	1.6E-02	Yes	Yes
Formaldehyde	50-00-0	225	1.1E-02	2.6E-03	Yes	Yes
Glycol Ether DB	112-34-5	1,167	5.6E-02	1.3E-02	Yes	Yes
Glycol Ether DEGHE	112-59-4	699	3.4E-02	8.0E-03	Yes	No
Glycol Ether DM	111-77-3	400	1.9E-02	4.6E-03	Yes	Yes
Glycol Ether PM	107-98-2	427	2.1E-02	4.9E-03	No	Yes
Hexamethylene Diisocyanate	822-06-0	22	1.1E-03	2.5E-04	Yes	Yes
Methanol	67-56-1	813	3.9E-02	9.3E-03	Yes	Yes
Methyl isobutyl ketone	108-10-1	8,861	4.3E-01	1.0E-01	Yes	Yes
Methyl Methacrylate	80-62-6	392	1.9E-02	4.5E-03	Yes	Yes
Polyethylene Glycol	57-55-6	201	9.7E-03	2.3E-03	No	No
Styrene	100-42-5	187	9.0E-03	2.1E-03	Yes	Yes
Toluene Diisocyanate	584-84-9	5	2.4E-04	5.7E-05	Yes	Yes
		<b>HAP Total =</b>	<b>78.4</b>	<b>18.6</b>		

**Note:**  
 Represents the significant federal HAPs. Does not include all state TACs.





<b>Forrest Paint 202805</b>				
<b>Emission Detail Sheets</b>				
<b>PM Emissions</b>				
<b>PM Emitting Paint Production Emission Units</b>				
	Scale Factor	Max LRARM Usage (lbs/yr)	Pigment (TPY)	Potential Emissions (TPY)
EU6, EU9, EU12, EU13	4.2	39,129,678	9,782	0.20
<b>Emission Factors</b>	<b>Value</b>	<b>Units</b>	<b>Total PM</b>	<b>0.20</b>
Baghouse Control	99.8	%	Total PM10	0.19
PM <sub>10</sub> Portion	99.5	%	Total PM2.5	0.19
PM <sub>2.5</sub> Portion	99	%		
<b>Powder Coating Emission Units</b>				
		Hours/year	Production Rate (lbs/hr)	
EU15	Extruder and grinder	8760	2.5	
EU16	Powder Production	8760	35	
EU17	Powder Lab	8760	5	
		Capacity (lbs/yr)	Capacity (TPY)	Potential Emissions (TPY)
EU15	Extruder and grinder	21,900	10.95	0.022
EU16	Powder Production	306,600	153.3	0.307
EU17	Powder Lab	43,800	21.9	0.044
<b>Plant Site Total</b>	<b>TPY</b>		<b>Total PM</b>	<b>0.372</b>
<b>PM</b>	<b>0.568</b>		<b>Total PM10</b>	<b>0.370</b>
<b>PM10</b>	<b>0.565</b>		<b>Total PM2.5</b>	<b>0.369</b>
<b>PM2.5</b>	<b>0.562</b>			
<b>Notes:</b>				
LRARM actual usage based on average of the five year period 2018-2022.				
LRARM typical production is 1 shift/5 days per week. Scaled to 3 shifts/7 days per week.				
Pigment represents about 50% of LRARM usage.				
AP-42 Table 6.4-1 emission factor of 20 pounds of PM emissions per ton of pigment produced.				
Assumes all baghouses control PM emissions by 99.8%.				
PM10 and PM2.5 portions of PM based on DEQ AQ-EF03.				

<b>Forrest Paint 202805</b>				
<b>Emission Detail Sheets</b>				
<b>Fugitive Emissions from Sources Outside Paint Production Area</b>				
	<b>2008</b>		<b>December 16, 2009 Report</b>	
	<b>Material</b>	<b>VOC</b>		
<b>Month</b>	<b>Usage</b>	<b>Usage</b>		
			Storage Tanks Losses =	925
January	714,220	358,210	Fugitive (Valves & Pumps) =	2,887
February	555,293	278,478	81T0000 Canning =	234
March	472,463	199,092	Tinters Spray Booth =	2,403
April	582,988	257,586	Aerosol Production =	1,661
May	562,605	231,270	<b>Total =</b>	<b>8,111</b>
June	582,227	255,513		
July	530,983	135,741	2008 Percent Loss =	0.24%
August	694,063	287,683		
September	589,552	254,097		
October	682,029	366,803		
November	591,049	299,121		
December	644,911	389,901		
<b>Total =</b>	<b>7,202,383</b>	<b>3,313,495</b>		

<b>Forrest Paint 202805</b>				
<b>Emission Detail Sheets</b>				
<b>Baseline Emission Calculations</b>				

Baseline VOC Emission - Details from Title V Permit No. 202805 (Expired September 16, 2003)

Solvent-based Paint Manufacturing			
1978 Solvent Usage (lbs)	Emission Factor (lb/lb)	Estimated Emissions (lb/yr)	Estimated Emissions (ton/yr)
1220000	0.030	36600	18.3

Waste Pond Discharge			
1978 Solvent Disposed (lbs)	Emission Factor (lb/lb)	Estimated Emissions (lb/yr)	Estimated Emissions (ton/yr)
86300	0.975	84143	42.1

<b>Total Baseline VOC (ton/yr)</b>
<b>60.4</b>

Baseline PM Emissions - Details from Title V Permit No. 202805 (Expired September 16, 2003)

Operating Schedule <sup>1</sup>	3500	hours/yr
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Emission Unit	Year Installed	Design Flow Rate (cfm)	Grain Loading Limit (gr/dscf)	Baseline Emissions (ton/yr)
CD-1 (South Baghouse - Left)	1975	1100	0.1	1.65
CD-2 (South Baghouse - Right)	1978	1100	0.1	1.65

<b>Total Baseline PM (ton/yr)</b>
<b>3.3</b>

<sup>1</sup>NOTE: Title V Permit No. 202805 lists the operation hours for the baseline calculation as 3000, but the final baseline calculation listed used 3500 hours in order to calculate 3.3 tons/yr.