

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

Review Report

Willamette Valley Sandblasting

1250 Bertelson Road
Eugene, Oregon, 97402

Permit No. 208932

Source Information:

Primary SIC	1799 – Special Trade Contractors, NEC
NAICS	238990 – All Other Specialty Trade Contractors
Source	B.74: All other sources not listed

Categories (LRAPA title 37, Table 1)	herein that LRAPA determines an air quality concern exists
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
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. Willamette Valley Sandblasting ('the facility' or 'WVS') operates a sandblasting operation based at 1250 South Bertelsen Road in Eugene, Oregon.

General Background Information

2. Willamette Valley Sandblasting operates a sandblasting operation at 1250 South Bertelsen Road in Eugene and at various locations in Lane County. The facility operates sandblasting mainly inside of an enclosed hanger with the sandblasting platform located at the center. The facility owns two (2) abrasive blasting devices, with the first sandblasting device having a 300 pound per hour capacity and using Green Diamond 3060 media. The second sandblasting device has a 300 pound per hour capacity and uses Walnut Shell media. The second sandblasting device is seldom used. And hence, for the sake of this assessment, we will only consider the first sandblasting device as their emission unit. The facility controls particulate matter emissions using enclosures with fabric curtains and a water sprinkler system located at the entrance of the hanger. The facility operates off-site sandblasting activities occasionally with the usage of around 2400 lbs of Green Diamond 3060 annually. Emission details are included in the Emission Detail Sheet at the end of this review report.

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. The facility submitted a timely renewal application on May 30, 2023, and 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 5 tons per year of particulate matter in a maintenance area and 10 tons/year (TPY) for other criteria pollutants, the permit action is considered a Simple "low" ACDP renewal under LRAPA 37-0064(2)(a).

Attainment Status

4. 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 PM₁₀ 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

5. LRAPA has reviewed and issued the following compliance actions to this facility since 2002:

Date(s) Approved/Valid	Permit Action Type	Description
02/21/2002 – 02/20/2007	Minimal Source ACDP	Initial permit
02/21/2007 – 02/20/2012	Minimal Source ACDP	Renewal
07/18/2012 – 07/18/2017	Simple ACDP	Renewal
02/08/2019 – 02/08/2024	Simple ACDP	Renewal
Upon Issuance	Simple ACDP	Renewal

Emission Unit Description

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

Emission Unit ID	Emission Unit Description	Pollution Control Device (PCD ID)	Installed / Last Modified
EU-1	Blasting - Enclosed	Enclosures and water spray (--)	2002

Significant Emission Units

7. Blasting – Enclosed

The blasting device has a media usage capacity of 300 pounds per hour. The emission factor for blasting inside is 2.95 pounds of PM per ton of abrasive usage, derived from SCAQMD Guidelines for Reporting Abrasive Blasting Operations Emissions. The emission factors for federal HAPs and Cleaner Air Oregon TACs are based on emission factors from SDAQMD for abrasive blasting.

Nuisance, Deposition and Other Emission Limitations

8. Under subsection 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.
9. Under section 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.
10. Under subsection 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 and Monitoring

11. The facility is subject to the visible emission limitations under subsection 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 facility is required to take corrective action if any visible emissions are identified and contact LRAPA or conduct a US EPA Method 9 test if the visible emissions cannot be eliminated. The facility will also be required to prepare an O&M plan.
12. 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 and contact LRAPA or conduct a US EPA Method 9 test if the visible emissions cannot be eliminated. The permittee will also be required to prepare an O&M plan.
13. Each emission 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 and contact LRAPA or conduct a US EPA Method 9 test if the visible emissions cannot be eliminated. The permittee will also be required to prepare an O&M plan.

Typically Achievable Control Technology (TACT)

14. 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.
- a. 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: Blasting. While LRAPA has not performed a formal TACT determination for PM from this emission unit, LRAPA has determined that performing abrasive blasting indoors using their existing controls likely meets TACT.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

15. LRAPA reviewed the following NESHAPs to determine their applicability to this facility:
- a. 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).

New Source Performance Standard (NSPS) Applicability

16. There are no sources at this facility for which New Source Performance Standards (NSPS) standards have been promulgated or are applicable.

Plant Site Emission Limits (PSELs)

17. 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	24	1.9	1.9	25
PM ₁₀	NA	0	0	14	1.9	1.9	15
PM _{2.5}	NA	0	0	9	1.9	1.9	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	de minimis	de minimis	NA	40
GHG	NA	0	0	de minimis	de minimis	NA	75,000

- a. The facility does not have a baseline emission rate for pollutants other than PM_{2.5} and GHGs 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 did not request a baseline for this pollutant.

- b. The netting basis for all pollutants is 0 (zero) in accordance with subsection 42-0046(2)(c)(B) and (4).
- c. In accordance with subsection 42-0041(2), the PSEL for PM, PM₁₀, PM_{2.5}, have been set equal to the source's potential-to-emit (PTE). The previous PSEL for these pollutants were set at Generic PSEL that are no longer allowed by rule. No PSEL are set for CO, NO_x, SO₂, VOC, and GHG in accordance with paragraph 42-0020(3)(a) because these pollutants are emitted below the de minimis as defined in title 12.

Unassigned Emissions and Emission Reduction Credits

18. The facility has no 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.

Pollutant	Proposed Netting Basis (TPY)	PTE (TPY)	Unassigned Emissions (TPY)	Emission Reduction Credits (TPY)	SER (TPY)
PM	0	1.9	0	0	25
PM ₁₀	0	1.9	0	0	15
PM _{2.5}	0	1.9	0	0	10
CO	0	de minimis	0	0	100
NO _x	0	de minimis	0	0	40
SO ₂	0	de minimis	0	0	40
VOC	0	de minimis	0	0	40
GHGs	0	de minimis	0	0	75,000

Federal Hazardous Air Pollutants (HAP)/Toxic Air Contaminants (TAC)

19. Potential annual federal 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 0.233 tons per year. The potential aggregate of federal HAP emissions is 0.763 tons per year. The facility is considered a natural minor or area source of federal HAPs.
20. 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 TAC. LRAPA required reporting of approximately 600 TAC in 2016 and regulates approximately 260 TAC that have Risk Based Concentrations established in the rule. All federal HAPs are on the list of approximately 600 TAC. 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 TAC emissions. Until then, sources will be required to report TAC emissions triennially.
21. Provided below is a summary of the federal HAP and CAO TAC potential emission estimates. See the Emission Detail Sheets section of this Review Report for more information.

CAS/DEQ Number	Pollutant	PTE (TPY)	Federal HAP	CAO TAC
Metals				
7440-43-9	Cadmium and compounds	0.023	Yes	Yes
7440-47-3	Chromium (III) compounds	0.233	Yes	No
7440-50-8	Copper and compounds	0.021	No	Yes
7439-92-1	Lead and compounds	0.021	Yes	Yes
7439-96-5	Manganese and compounds	0.233	Yes	Yes
7440-02-0	Nickel compounds, insoluble	0.233	Yes	Yes

Toxics Release Inventory

22. 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. 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 2022, this facility did not report any emissions to the TRI program. In order to report emissions to the TRI program, a facility must operate under a reportable NAICS code, meet a minimum employee threshold, and manufacture, process, or otherwise use chemicals in excess of the applicable reporting threshold for the chemical. This facility has not reported any emissions to the TRI program because they apparently do not manufacture, process, or otherwise use chemicals in excess of the applicable reporting thresholds.

Compliance History

23. This facility is regularly inspected by LRAPA and occasionally by other regulatory agencies. The following table indicates the inspection history of this facility since 1974:

Type of Inspection	Date	Results
LRAPA - Full Compliance Evaluation	01/17/2018	No evidence of non-compliance

24. LRAPA has issued the following violation notices and/or taken the following enforcement actions against this facility since the facility began operation:

Date	Type of Notice	Notes
March 21, 1994	NON 1025	Sandblast without containment. NON 1025 was closed on April 04, 1994 with no further action
July 12, 1994	NON 9443	Sandblast without containment. NCP 94-43 (NON 9443) was issued on July 12, 1994 in the amount of \$1,900. There was a request to reduce the penalty amount on August 4, 1994. The

		full amount was received August 24, 1994.
April 6, 1995	NON 9507	Fail to minimize emissions while operating sandblasting equipment. NCP 95-07 (NON 9507) was issued on April 6, 1995 in the amount of \$1,200. The full amount was received April 27, 1995.
September 12, 1995	NON 1132	Sandblast without containment. NCP 1995-21 (NON 1132) was issued on September 12, 1995. Resolved on June 17, 1996 along with NCP 1996-1198.
February 1, 1996	NON 1198	Sandblast without containment and no water spray system. NCP 1996-1198 (NON 1198) was issued on February 1, 1996. The facility paid \$1,500 on February 22, 1996 and both NCP 1995-21 and NCP 1996-1198 were closed June 17, 1996.
April 2nd, 1996	NON 1217	Fail to minimize emissions while operating sandblasting equipment. NCP 1996-1217 (NON 1217) was issued on April 2nd, 1996 in the amount of \$2,200. NCP 1996-1217 was withdrawn and dismissed on the condition that a facility containment and compliance assurance plan be agreed upon.
June 21, 1999	NON 1800	Fail to take reasonable precautions to prevent particulate matter from becoming airborne, and failure to use adequate containment (water) during sandblasting. NCP 99-1800 (NON 1800) was issued on June 21, 1999 in the amount of \$1,200. There was a request to reduce the penalty amount on August 4, 1994. The request was approved, and the amount was reduced to \$900. LRAPA further agreed to suspend \$300 of the remaining amount on the condition that Willamette Valley Sandblasting would operate in compliance with LRAPA regulations and would abide by the CAOP (Compliance Assurance Operating Procedures) submitted to LRAPA on November 29, 1999. The full amount of \$600 was received January 14, 2000.
May 25, 2000	NON 1914	Fail to take reasonable precautions to prevent particulate matter from becoming airborne; failure to use water in sandblast gun; failure to use water sprinkler off containment shed. The suspended civil penalty of NCP 99-1800 in the amount of \$300 became due and was paid July 20, 2000. Willamette Valley Sandblasting was also required to submit an application for an ACDP within 45 days of the receipt of the July 5, 2000 notice.
June 07, 2011	NON 3300	Fail to use reasonable precautions such as adequate containment during sandblasting to prevent particulate matter from becoming airborne. NON 3300 was closed on June 28, 2011 with no further action.

Source Testing History

25. The facility is not required to conduct performance testing. LRAPA is not aware of any performance testing conducted at this facility.

Recordkeeping Requirements

26. 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			
Abrasive	Media Usage	Pounds	Monthly
General Recordkeeping			
Operation and Maintenance Plan	Not Applicable	Not Applicable	Maintain the current version on-site
Log of nuisance complaints	Not Applicable	Not Applicable	Upon receipt of complaint
Visible Emission Survey	Opacity	%	Quarterly
Upset log of all planned and unplanned excess emissions, as required by Condition G16 of the permit	Not Applicable	Not Applicable	Per occurrence

Reporting Requirements

27. 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 4 and 5, including supporting calculations.	Annual	February 15
A summary of all complaints received by the permittee and their resolution as required by Condition G11	Annual	February 15
The upset log required by Condition G14 of the permit, if any planned or unplanned excess emissions have occurred during the reporting period.	Annual	February 15

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

Public Notice

29. Pursuant to LRAPA 37-0064(5)(a), which became effective on April 11, 2024, issuance of a renewed Simple 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 will be on public notice April 25, 2024 to May 31, 2024. Written comments may be submitted during the 35-day comment period. If requested by ten (10) or more individuals or an individual representing a group of more than ten (10) individuals, there will be a public hearing following the comment period.

After the comment period and hearing (if requested), LRAPA will respond to comments received and then take final action to issue or deny the permit within 45 days of the close of the public comment period or hearing period.

Emission Detail Sheet

Willamette Valley Sandblasting
 Permit No. 208932

Emission Details:

Sandblasting Booth Emissions				
Process	Pollutant	Projected Maximum Usage (lb abrasive/yr)	Emission Factor (lbs PM/ton abrasive)	Projected Annual Emissions (tons)
Sandblasting in shed with fabric covering	PM ₁₀ /PM _{2.5}	2,628,000	2.95	1.94

HAP/TAC Emissions

Pollutant	CAS No.	Emission Factor (lb/ton abrasive)	Uncontrolled Emissions (TPY)	Controlled Emissions (TPY)
Cadmium	7440-43-9	1.2E-02	1.6E+01	0.023
Chromium (III)	7440-47-3	1.2E-01	1.6E+02	0.233
Copper	7440-50-8	1.1E-02	1.4E+01	0.021
Lead	7439-92-1	1.1E-02	1.4E+01	0.021
Manganese	7439-96-5	1.2E-01	1.6E+02	0.233
Nickel	7440-02-0	1.2E-01	1.6E+02	0.233

Note:

Maximum design capacity is the sum of all the sandblasting operations.

Particulate Matter Emission Factors were obtained from SCAQMD Guidelines for Reporting Abrasive Blasting Operations Emissions – December 2014
 Federal HAP/Cleaner Air Oregon TAC uncontrolled emissions based on San Diego Air Quality Management District emission factors for abrasive blasting
 Federal HAP/Cleaner Air Oregon TAC controlled emissions based on the ratio of tons of PM emissions to tons of abrasive used
 Projected Annual Emissions = Projected Maximum Usage x Emission Factor.