

Lane Regional Air Protection Agency
 Simple Air Contaminant Discharge Permit

REVIEW REPORT

Gheen Irrigation Works, Inc. dba Lake - Eugene

Permit No. 203144

29475 Airport Road
 Eugene, OR 97402
<http://www.gheenirrigation.com/>

Source Information:

SIC	3479 - Galvanizing and Pipe Coating
NAICS	332812 - Metal Coating

Source Categories (LRAPA Title 37, Table 1)	B.30 - Galvanizing and Pipe Coating
Public Notice Category	II

Compliance and Emissions Monitoring Requirements:

Unassigned emissions	n
Emission credits	n
Special Conditions	n
Compliance schedule	n

Source test [date(s)]	n
COMS	n
CEMS	n
Ambient monitoring	n

Reporting Requirements:

Annual report (due date)	Feb 15
NSPS Report (due date)	n
Monthly report (due dates)	n

Excess emissions report	y
Other reports	n

Air Programs:

NSPS (list subparts)	n
NESHAP (list subparts)	n
CAM	n
Regional Haze (RH)	n
Synthetic Minor (SM)	n
Part 68 Risk Management	n
Title V	n
ACDP (SIP)	n
New Source Review (NSR)	n
Prevention of Significant Deterioration (PSD)	n
Acid Rain	n
Clean Air Mercury Rule (CAMR)	n
TACT	n

Permitting Action

1. The permit is a renewal for an existing Air Contaminant Discharge Permit (ACDP) which was issued on July 2, 2014 and was originally scheduled to expire on July 2, 2019.

LRAPA issued an addendum on May 8, 2009 that changed the permit type from "Minimal" to "Simple" in accordance with the October 2008 adopted permitting rule changes.

The facility indicated in their 2019 renewal application that no major changes have been made to the permit since the last renewal.

Other Permits

2. No other permits have been issued or are required by LRAPA for this facility.

The company also has a Simple ACDP (Permit Number 203109) for the powder coating operation located at 1248 Willagillespie Road in Eugene.

Attainment Status

3. The facility is located in a maintenance area for CO and PM₁₀. The area is in attainment for all other criteria pollutants.

General Background Information

4. The facility operates a powder coating operation at 29475 Airport Road in Eugene.

The facility emissions are primarily related to welding, painting, and sandblasting activities. A natural gas-fired oven is used to bake the powder-coated products, but the maximum heat input of the oven, (1.5 MMBtu/hour), is considered to be a "categorically insignificant activity" as defined in LRAPA Title 12. Spray-applied coatings primarily consist of zinc (96% by weight) and a nominal amount of VOC content. Xylene is used to thin the paint as well as for clean-up, and the facility reports typical usages of approximately one 55 gallon drum per year, and disposal of one 55 gallon drum every three years.

The operating schedule for the facility is 2,210 hours/year (8.5 hours/day, 5 days/week, and 52 weeks/year).

Emission Unit Description

5. The facility controls particulate matter emissions by the use of two (2) baghouses. Other specific emission sources include:

EU ID	Emission Unit (EU)	Control Device
EU-1	Sandblasting	Enclosed with baghouse
EU-2	Powder Coating	Baghouse
EU-3	Welding	Air evacuation from work area
EU-4	Paint Booth	Filters

Compliance History

6. The facility has never been inspected and there have been no complaints.

Plant Site Emission Limits (PSELs) Information

- 7.

Annual Plant Site Emission Limits (PSELs)
(tons per year)

Source	PM	PM ₁₀	PM _{2.5}	VOC
Metal Fitting Manufacturing	24	14	9	39

- a. The proposed PSELs for all pollutants are equal to the Generic PSEL in accordance with LRAPA 37-0064(3)(b) and the netting basis is zero in accordance with 42-0040(2).
 - b. PSELs for CO, NO_x, SO₂, HAPs, and GHGs are not included in this permit since emissions of these pollutants are less than the respective de minimis emission rates.
 - c. PSELs for PM, PM₁₀, PM_{2.5}, and VOC are included, even though emissions are expected to be de minimis, because it is estimated that the facility has the potential to emit above the 1 ton/year de minimis thresholds for each pollutant, respectively.
 - d. The PSEL is a federally enforceable limit on the potential to emit.
 - e. Recordkeeping of the parameters listed in Condition 9 of the permit will be used to ensure compliance with the PSELs.
8. The pollutants of concern associated with this type of facility are particulate matter (PM) from epoxy dust, welding, and sandblasting, and VOC emissions from coatings and solvents. The attachment to this review report contains emissions estimates for the facility's emission units.

Baseline Emission Rate (BER) and Significant Emission Rate (SER)

9. Baseline Emissions were not set in the permit because the facility is well below the Significant Emission Rates (SERs) as listed in Title 12 of LRAPA's Rules and Regulations and because the facility has chosen not to maintain the baseline emissions by way of the Simple ACDP permit type selection.

Hazardous Air Pollutants (HAPs)

10. 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 187 hazardous air pollutants are on the list of approximately 600 toxic air contaminants. The hazardous air pollutants and toxic air contaminants listed below were reported by the source

in 2016 and verified by LRAPA. 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.

11. A major source for hazardous air pollutants (HAPs) is a facility that has the potential to emit 10 or more tons per year of any single HAP or 25 or more tons per year of combined HAPs. This facility is not a major source of hazardous air pollutants. Provided below is a summary of the HAP and toxic air contaminant emissions.

Hazardous Air Pollutant/Toxic Air Contaminants	Potential to Emit (pounds/year)
Xylene	288
Toluene	46
Ethyl Benzene	26
*n-Butyl alcohol	7
*Methyl Ethyl Ketone (MEK)	6
Methyl Isobutyl ketone (MIBK)	6
Zinc	3.9
*1,2,4-Trimethylbenzene	2
Manganese	0.91
*Aluminum	0.59
*Silica, crystalline (respirable)	0.54
*Copper and copper compounds	0.24
Cobalt	0.071
Chromium trioxide	0.042
Total	387.3

*Indicates toxic air contaminants reported that are not hazardous air pollutants.

NESHAPS Applicability

12. There are no sources at this facility for which any NESHAPs, (National Emissions Standards for Hazardous Air Pollutants), standards have been promulgated. The Subpart 6X Metal Fabrication NESHAP is not applicable because the facility is not one of the affected groups of sources. The facility specifies their primary SIC code as 3479 which is not a SIC code listed as being an applicable source category.

NSPS Applicability

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

Record Keeping and Reporting

14. A record of the following data must be maintained for a period of at least **five (5) years** at the plant site and must be available for inspection by authorized representatives of LRAPA:

Activity	Parameter	Units	Recording Frequency
Sandblasting	Abrasive Media Usage	Pounds	Annually
Powder Coating	Coating Usage	Pounds	Annually
Welding	Wire/Rod Usage	Pounds	Annually
Coatings/Solvents	Material Usage and VOC/HAP content	Gallons	Annually
Baghouse Maintenance			On Occurrence

15. The facility is required to submit an annual report by **February 15th** each year to include the information identified in Item 14 above.

Additional Limitations

16. The facility is subject to the visible emissions standards in LRAPA 32-010(3), the particulate grain-loading standard in LRAPA 32-015(2)(b)(B), the highest and best requirement of LRAPA 32-005. Operation of well-maintained baghouses and filters should assure compliance with the grain-loading and visible emissions limits.

Public Notice

17. The draft permit was on public notice from July 5, 2019 to August 3, 2019. No written comments were submitted during the 30-day comment period.

Cnc/cmw
08/05/19

Gheen (Airport Rd) Emission Details

Maximum actual usage, taken from annual reports, used for calculations

EU-1 - Sandblasting				
Pollutant	Projected Max. Abrasive Usage (lb abrasive/yr)	Emission Factor (lbs PM/lb abrasive)	Conversion Factor (tons/lb)	Annual Emissions (tons)
PM/PM ₁₀ /PM _{2.5}	105,670	0.00069	0.0005	0.036

Maximum design capacity is the sum of all the sandblasting operations.
 Particulate Matter Emission Factors were obtained from AP-42 table 13.2.6-1
 Filter emissions assumed to be 100% PM_{2.5} emissions from DEQ AQ-EF08
 Projected Annual Emissions = Projected Maximum Usage x Emission Factor x Conversion Factor.

EU-2 - Powder Coating				
Pollutant	Projected Max. Powder Coating Usage (lb/yr)	Emission Factor (lb lost/lb used)	Conversion Factor (tons/lb)	Annual Emissions (tons)
PM/PM ₁₀ /PM _{2.5}	3,000	0.05	0.0005	0.075

Powder Coating Utilization Rate Emission Factor was obtained from AP-42 Ch. 4.2.2.12
 Filter emissions assumed to be 100% PM_{2.5} emissions from DEQ AQ-EF08
 Projected Annual Emissions = Projected Maximum Usage x Emission Factor x Conversion Factor.

EU-3 - Welding				
Pollutant	Projected Maximum Usage (lb wire/yr)	Emission Factor (lbs PM/lb wire)	Conversion Factor (tons/lb)	Annual Emissions (tons)
PM/PM ₁₀ /PM _{2.5}	9,735	0.0816	0.0005	0.397

Particulate Emission Factor obtained from AP-42 table 12.19-1 for highest electrode type; assume PM is 100% PM₁₀/PM_{2.5}
 Projected Annual Emissions = Projected Maximum Usage x Emission Factor x Conversion Factor.

VOC/HAP Emissions			
Pollutant	Projected Max. Usage (lb/yr)	Conversion Factor (tons/lb)	Annual Emissions (tons)
VOC	1,033.2	0.0005	0.5166
Xylene thinner (VOC/HAP)	132.70	0.0005	0.066

Uncontrolled VOC emissions from solvents and surface coatings considered 100% emitted from AP-42 Ch. 4.2.2.1.2
 Projected Annual Emissions = Projected Maximum Usage x Conversion Factor.

Total Site Emissions	
Pollutant	Projected Annual Emissions (tons)
PM/PM ₁₀ /PM _{2.5}	0.509
VOC	0.583
HAP (Xylene)	0.066