

Lane Regional Air Protection Agency
 Simple Air Contaminant Discharge Permit

REVIEW REPORT

Master Sandblasting and Powder Coating Inc.
 990 Bethel Drive, Unit #6
 Eugene, Oregon 97402

Permit No. 205200

Source Information:

SIC	1799 - Special Trade Contractors
NAICS	238990 - All other Specialty Trade Contractors

Source Categories (LRAPA Title 37, Table 1)	B.74 All other sources not listed herein that LRAPA determines an air quality concern exists
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 new permit for a new source. The primary reason for this permit action is to issue a new permit.

Other Permits

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

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 sandblasting and powder coating operation at 990 Bethel Drive, Unit #6 in Eugene. The large curing oven is heated using propane that is stored onsite. The small curing oven is heated using electricity.

In the sandblasting and powder coating process, compressed air propels sand or other abrasives at high velocity against metal surfaces to etch it. The etched metal surfaces can then be coated in powder using electro-static adhesion and baked in an oven to create a durable finish.

Emission Unit Description

5. The facility controls particulate matter (PM) emissions using a High Efficiency Filter on the Powder Coating Booth, and two (2) Dust Collecting Baghouses for the Sandblasting Booths. Other specific emission sources include:

EU ID	Emission Unit (EU)	Control Device
EU-1	One (1) Large and one (1) Small Powder Coating Ovens	NA
DC-1	Powder Coating Booth – Dust Collection System	High Efficiency Filter
DC-2	Large Sandblasting Booth – Dust Collection System	Baghouse
DC-3	Small Sandblasting Booth – Dust Collection System	Baghouse

Enforcement Actions

6. There have been no enforcement actions against the facility.

Plant Site Emission Limits (PSELs) Information

- 7.

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

Source	PM	PM ₁₀	PM _{2.5}
Sandblasting and Powder Coating	24	14	9

- 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, NOx, SO₂, VOCs, HAPs, and GHGs are not included in this permit since emissions of these pollutants are less than the respective de minimis emission rates. PSELS for PM, PM₁₀, and PM_{2.5} are included even though emissions are expected to be de minimis.
 - c. The PSEL is a federally enforceable limit on the potential to emit.
 - d. Recordkeeping of the parameters listed in Condition 10 of the permit will be used to ensure compliance with the PSELS.
8. The pollutants of concern associated with this type of facility are PM/PM₁₀/PM_{2.5}. All emissions from baghouses and high efficiency filters assumed to be 100% PM_{2.5} as per DEQ AQ-EF08. Emissions of the above pollutants are estimated to be minimal and all less than one (1) ton per year. The attachment to this review report contains emissions estimates for the applicable 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)/Toxic Air Contaminants

10. 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. This facility applied for an ACDP before the November 16, 2018 effective date of the CAO rules and is considered an existing source under CAO.

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. This facility was not operating in 2016 and therefore did not submit a report to document their 2016 toxic air contaminant emissions. 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 source is not a major source of hazardous air pollutants.

NESHAPS Applicability

12. There are no sources at this facility for which NESHAPS, (National Emissions Standards for Hazardous Air Pollutants), standards have been promulgated.

The facility is not subject to 40 CFR Part 63 Subpart XXXXXX (6X) – Metal Fabrication and Finishing Source Nine Categories (area sources), because it is not primarily engaged in an activity identified in the list of Standard Industrial Classification (SIC) codes subject to 6X regulation.

The facility is not subject to 40 CFR Part 63 Subpart HHHHHH (6H) – Paint Stripping and Miscellaneous Surface Coating Operations (area sources), because they are only engaged in powder coating and do not use spray-applied coatings as defined in 6H.

NSPS Applicability

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

The facility is not subject to NSPS 40 CFR Part 60 Subpart EE - Standards of Performance for Surface Coating of Metal Furniture, because powder coatings are not part of the definition of organic coatings as defined in Subpart EE.

This facility is not subject to NSPS 40 CFR Part 60 Subpart MM “Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations”. Subpart MM contains performance requirements for VOC emissions from surface coatings operations at automobile and light duty truck assembly plants. The standard is not applicable to the facility since it is not an automobile or light-duty truck assembly plant. These standards were written primarily for EDP (Electrodeposition) systems where a part is submerged in a tank filled with coating material and an electrical field is used to attract the coating material to the part. The VOC emissions mainly occur when the part is removed, and the solvent evaporates. All solvents added to the dip tank are effectively released to the atmosphere through evaporation. There are no VOCs released when applying powder coatings and depending on the formula, some minute VOC emissions are possible during the curing process. Powder coatings are not explicitly exempt from this regulation, but they fall well below the non-EDP regulation of 1.42 lb VOC per gallon of coating. The polyester powder coating that Master Sandblasting will be using is a zero VOC coating.

Record Keeping and Reporting

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

Activity	Parameter	Units	Recording Frequency
Propane Combustion	Propane Usage	Gallons	Monthly
Powder Coating	Coating Material Usage	Pounds	Monthly
Sandblasting	Abrasive Media Usage	Pounds	Monthly
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 condition 14 above.

Special Conditions

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 baghouse filters and a well-maintained powder coating booth filter 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
8/06/19

Master Sandblasting Emission Details:

EU-1 Propane Combustion - Large Curing Oven				
Pollutant	Projected Max. Propane Usage (gal/yr)	Emission Factor (lb/1000 gal propane)	Conversion Factor (tons/lb)	Projected Annual Emissions (Tons)
PM/PM ₁₀ /PM _{2.5}	8,760	0.7	0.0005	0.003
NO _x	8,760	13	0.0005	0.057
CO	8,760	7.5	0.0005	0.033

The oven operates a maximum of 8,760 hours per year (24 hrs/day, 7days/week, 52 weeks/yr)
 The projected maximum propane usage is 8,760 gallons/year: (1 gal/hr x 8,760 hrs/yr)
 Projected Annual Emissions = Projected Max. Propane Usage/1000 x Emission Factor x Conversion Factor
 Gaseous Emission Factors were obtained from AP-42 table 1.5-2

DC-1 Powder Coat Spray Booth Emissions				
Pollutant	Projected Maximum Usage (lb coating/yr)	Emission Factor (lb lost/lb used)	Conversion Factor (tons/lb)	Projected Annual Emissions (Tons)
PM/PM ₁₀ /PM _{2.5}	6,570	0.1	0.0005	0.3285

Coating used is Neat Koat Pure Polyester Powder Coating
 The projected maximum coating usage is 6,570 lb/year: (0.75 lb/hr x 8,760 hrs/yr)
 Particulate Matter 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

DC-2 & DC-3 Sandblasting Emissions				
Pollutant	Projected Maximum Usage (lb sand/yr)	Emission Factor (lb/1000 lb sand)	Conversion Factor (tons/lb)	Projected Annual Emissions (Tons)
PM/PM ₁₀ /PM _{2.5}	674,520	0.69	0.0005	0.233

Maximum design capacity is the sum of all the baghouse design capacities.
 Baghouse emissions assumed to be 100% PM_{2.5} emissions from DEQ AQ-EF08
 The projected maximum sand usage is 674,520 lb/year: (75+2 lb/hr x 8,760 hrs/yr)
 Projected Annual Emissions = Projected Maximum Usage/1000 x Emission Factor x Conversion Factor
 Particulate Matter Emission Factor was obtained from AP-42 table 13.2.6-1

Total Site Emissions	
Pollutant	Projected Annual Emissions (Tons)
PM/PM ₁₀ /PM _{2.5}	0.564
NO _x	0.057
CO	0.033