



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

Review Report

Vista Partners Inc. dba Newood Manufacturing

Permit No. 205808

10 North Seneca Road
Eugene, OR 97402
Website: <https://www.newood.com>

Source Information:

Primary SIC	2541 – Wood Office and Store Fixtures, Partitions, Shelving, and Lockers
Secondary SIC	--
Primary NAICS	337215 – Showcase, Partition, Shelving, and Locker Manufacturing
Secondary NAICS	--

Source Categories (LRAPA title 37, Table 1)	B.69: Surface Coating Operations: coating operations whose actual or expected usage of coating materials is greater than 250 gallons per month, excluding sources that exclusively use non-VOC and non-HAP containing coatings
Public Notice Category	III

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)	February 15
SACC (due date)	N
GHG Report (due date)	N
Quarterly Report (due date)	N

Monthly Report (due dates)	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
Synthetic Minor (SM)	N
SM-80	N
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. Vista Partners Inc. dba Newood Manufacturing ('the facility' or 'Newood') operates a wood office and store fixture production facility at 10 North Seneca Road in Eugene, Oregon.

General Background

2. The significant emission units at the facility include four (4) paint booths, wood working operations controlled by a dust collection system that includes one (1) stand-alone baghouse and one (1) cyclone and one (1) baghouse in series. The wood working operations also include a truck loading target box with a small cyclone that exhausts back into the dust collection system. The facility also has an electric-powered wood chipper that exhausts into the same control system for the wood working operations. Previous permits have included the wood chipper as a significant emission unit. This permit will include the wood chipper under the wood working operations. The facility has one natural gas-fired air makeup unit with a maximum heat input rating of 4.9 MMBtu per hour that facilitates the drying of coated products during cold weather. The facility has requested a limit on MAU natural gas usage to avoid having a PSEL for NOx and CO. The facility typically operates 2,080 hours per year (one shift). The facility began operations in 1979.

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 May 21, 2018 and is scheduled to expire on May 21, 2023. As the facility submitted a timely renewal application on January 19, 2023, the current permit will remain in effect until final action has been taken on the renewal application. Because the actual emissions from calendar year 2022 were less than 10 tons/year for each criteria pollutant, this 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 carbon monoxide 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 permitting actions to this facility:

Date(s) Approved/Valid	Permit Action Type	Description
06/26/1995 – 06/25/2000	Synthetic Minor ACDP	Initial air permit
11/02/1998	Synthetic Minor ACDP	Permit modifications to enhance synthetic minor limits, monitoring, and recordkeeping
04/06/2004	Addendum No. 1	Installation of a lacquer booth
06/25/2000 – 06/24/2005	Synthetic Minor ACDP	Renewal
06/25/2005 – 06/24/2010	Synthetic Minor ACDP	Renewal
05/11/2009	Administrative Amendment	Agency-initiated modification to Simple ACDP
08/17/2012 – 08/17/2017	Simple ACDP	Renewal
05/21/2018 – 05/21/2023	Simple ACDP	Renewal
02/04/2021	Addendum 1 – Non-Technical Permit Modification	Name change
01/25/2023	Addendum 2 – Non-Technical Permit Modification	Name change
Upon Issuance	Simple ACDP	Renewal

Compliance History

6. The following table indicates the inspection history of this facility.

Agency	Type of Inspection	Date	Results
LRAPA	Full Compliance Evaluation	07/06/1995	In compliance
LRAPA	Full Compliance Evaluation	09/27/1996	In compliance
LRAPA	Full Compliance Evaluation	09/14/1997	In compliance
LRAPA	Full Compliance Evaluation	06/16/1998	In compliance
LRAPA	Full Compliance Evaluation	10/23/1998	In compliance
LRAPA	Full Compliance Evaluation	09/18/2000	In compliance
LRAPA	Full Compliance Evaluation	08/23/2001	In compliance
LRAPA	Full Compliance Evaluation	09/01/2004	In compliance
LRAPA	Full Compliance Evaluation	10/20/2005	In compliance
LRAPA	Full Compliance Evaluation	06/06/2006	In compliance
LRAPA	Full Compliance Evaluation	09/06/2007	In compliance

7. LRAPA has issued the following violation notices and/or taken the following enforcement action against this facility:

7a. The facility was issued a Notice of Non-Compliance (NON 1316) in 1996 related to a malfunction of one of the baghouses. The issue was corrected, and no civil penalty was assessed.

Source Testing

8. 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.

Emission Unit Description

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

Emission Unit	Description	Pollution Control Device	Year Installed
SB-1	Spray Booth #1	Dry filters	1984
SB-2	Spray Booth #2	Dry filters	1988
SB-3	Spray Booth #3	Dry filters	1996
SB-4	Spray Booth #4	Dry filters	2000
WW	Woodworking Activities	Two (2) baghouses and two (2) cyclone	1979
MAU	4.9 MMBtu/hr Natural Gas-Fired Makeup Air Unit	None	2004

Emission Limitations

10. 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. An Operations and Maintenance Plan (O&M Plan) will be used to ensure that the facility is complying with this limitation.

11. The non-fuel burning equipment at this facility are subject to the particulate matter emission limitations under LRAPA 32-015(2). 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. An Operations and Maintenance Plan (O&M Plan) will be used to ensure that the facility is complying with this limitation.

12. The non-fuel burning equipment 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. An Operations and Maintenance Plan (O&M Plan) will be used to ensure that the facility is complying with this limitation.
13. The fuel burning equipment at this facility are subject to the particulate matter emission limitations under LRAPA 32-030(1)(b). For fuel burning equipment sources installed, constructed, or modified after June 1, 1970, but prior to April 16, 2015, for which there are no representative compliance source test results prior to April 16, 2015, the particulate matter emission limit is 0.14 grains per dry standard cubic foot. An Operations and Maintenance Plan (O&M Plan) will be used to ensure that the facility is complying with this limitation.
14. The facility is subject to the highest and best practicable treatment and control requirements under LRAPA 32-005. An Operations and Maintenance Plan (O&M Plan) will be used to ensure that the facility is complying with this limitation.
15. Emission unit MAU facilitates the drying of coated products during cold weather. The facility has requested a fuel usage limit of 20.9 million cubic feet of natural gas in any calendar year in order to keep the CO and NOx emissions from this source at de minimis for a PSEL. Compliance will be demonstrated through recordkeeping of natural gas usage.

Typically Achievable Control Technology (TACT)

16. LRAPA 32-008(1) requires an existing unit at 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.
 - 16a. For the spray booths (EU: SB-1 through SB-4) the facility uses dry filters to control particulate matter emissions such that particulate matter emissions do not exceed five (5) tons per year from any individual spray booth. VOC emissions cannot exceed ten (10) tons per year of VOCs from an individual spray booth. TACT is not applicable to any individual spray booth emissions.
 - 16b. For the woodworking activities (EU: WW) the facility uses baghouses and a cyclone to control particulate matter emissions such that particulate matter emissions do not exceed five (5) tons per year. TACT is not applicable to this emission unit.
 - 16c. For the 4.9 MMBtu/hr natural gas-fired makeup air unit (EU: MAU) has emissions of criteria pollutants less than five (5) tons per year of particulate or ten (10) tons per year of any gaseous pollutant. TACT is not applicable to this emission unit.

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)		PSEL Increase Over Netting Basis (TPY)	Significant Emission Rate (TPY)
		Previous (TPY)	Proposed (TPY)	Previous PSEL (TPY)	Proposed PSEL (TPY)		
PM	NA	0	0	NA	NA	NA	25
PM ₁₀	NA	0	0	NA	NA	NA	15
PM _{2.5}	NA	0	0	NA	NA	NA	10
CO	NA	0	0	NA	NA	NA	100
NO _x	NA	0	0	NA	NA	NA	40
SO ₂	NA	0	0	NA	NA	NA	40
VOC	NA	0	0	39	3.9	3.9	40
GHG	NA	0	0	NA	NA	NA	75,000
Individual HAP	NA	NA	NA	9	NA	NA	NA
Aggregate HAPs	NA	NA	NA	24	NA	NA	NA

- 17a. 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.
- 17b. The netting basis for all pollutants is 0 (zero) in accordance with LRAPA 42-0046(4) and 42-0040(2)&(3).
- 17c. In accordance with OAR 340-222-0041(2), the PSEL for VOC is set equal to the sources potential-to-emit (PTE) which is calculated to be 3.9 TPY. The previous PSEL for this facility was set at the Generic PSEL of 39 TPY.
- 17d. No PSELs are set for PM, PM₁₀, PM_{2.5}, NO_x, CO, SO₂ 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.
- 17e. The baseline year, netting basis, and SER are not applicable for limiting federal HAPs. The PSELs for individual federal HAPs and aggregate federal HAPs of 9 TPY and 24 TPY, respectively, have been removed from the permit. 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 10 TPY and 25 TPY, respectively.

Federal Hazardous Air Pollutants/Toxic Air Contaminants

- 18. 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 10 TPY and 25 TPY, respectively. Therefore, the facility is considered a minor or area source of federal HAPs.
- 19. 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 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.

20. Provided below is a summary of the federal HAP and CAO TAC emission estimates based on the potential emissions as calculated in the emission detail sheets. The highest potential emission for an individual HAP is glycol ethers (excluding ethylene glycol) at 1.26 TPY. The potential emissions in aggregate of all federal HAPs is 1.69 TPY.

Pollutant	CAS Number	Potential Emissions (lbs/yr)	Federal HAP	CAO Air Toxic
Organics				
4,4'-Methylenebis(phenyl isocyanate)	101-68-8	6.55	Yes	Yes
Acetaldehyde	75-07-0	0.18	Yes	Yes
Acetone	67-64-1	1056	No	Yes
Acrolein	107-02-8	0.11	Yes	Yes
Benzene	71-43-2	0.33	Yes	Yes
Benzo[a]pyrene	50-32-8	5.0E-05	Yes	Yes
Cyclohexane	110-82-7	162.4	No	Yes
Dibutyl pthalate	84-74-2	62.6	Yes	Yes
Diethylene glycol butyl ether	112-34-5	1683	Yes	Yes
Diethylene glycol ethyl ether	111-90-0	836	Yes	Yes
Dipropylene glycol methyl ether	34590-94-8	152.5	No	Yes
Epichlorohydrin	106-89-8	153.4	Yes	Yes
Ethylbenzene	100-41-4	0.89	Yes	Yes
Ethylene glycol	107-21-1	17.01	Yes	Yes
Ethylene glycol butyl ether	111-76-6	1151	No	Yes
Formaldehyde	50-00-0	0.71	Yes	Yes
Isopropyl alcohol	67-63-0	156.4	No	Yes
Methanol	67-56-1	48.8	Yes	Yes
Methyl ethyl ketone	78-93-3	19.16	No	Yes
Methyl isobutyl ketone	108-10-1	19.16	Yes	Yes
Naphthalene	91-20-3	1.3E-02	Yes	Yes
n-Hexane	110-54-3	31.40	Yes	Yes
Propylene glycol methyl ether acetate	108-65-6	153.4	No	Yes
Styrene	100-42-5	4.77	Yes	Yes
Toluene	108-88-3	494	Yes	Yes
Total PAHs (exc. Naphthalene)	--	4.2E-03	Yes	Yes
Trimethylbenzenes	25551-13-7	1.44	No	Yes
Xylene	1330-20-7	12.67	Yes	Yes
Inorganic Gases				
Ammonia	7664-41-7	134	No	Yes
Metals				
Aluminum hydroxide	21645-51-2	7.93	No	Yes
Arsenic	7440-38-2	8.4E-03	Yes	Yes
Barium	7440-39-3	0.18	No	Yes
Beryllium	7440-41-7	5.0E-04	Yes	Yes

Pollutant	CAS Number	Potential Emissions (lbs/yr)	Federal HAP	CAO Air Toxic
Cadmium	7440-43-9	4.6E-02	Yes	Yes
Chromium, Hexavalent	18540-29-9	5.9E-02	Yes	Yes
Cobalt	7440-48-4	3.5E-03	Yes	Yes
Copper	7440-50-8	3.6E-02	No	Yes
Manganese	7439-96-5	1.6E-02	Yes	Yes
Mercury	7439-97-6	1.1E-02	Yes	Yes
Molybdenum Trioxide	1313-27-5	6.9E-02	No	Yes
Nickel	--	8.8E-02	Yes	Yes
Selenium	7782-49-2	1.0E-03	Yes	Yes
Vanadium	7440-62-2	9.6E-02	No	Yes
Zinc	7440-66-6	5.59	No	Yes

Toxics Release Inventory

21. 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 2021, 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 do not manufacture, process, or otherwise use chemicals in excess of the applicable reporting thresholds.

New Source Performance Standards (NSPSs)

22. 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)

23. LRAPA reviewed the following NESHAPs to determine their applicability to this facility:

- 23a. 40 CFR Part 63 subpart JJ – National Emission Standards for Wood Furniture Manufacturing Operations is not applicable because the facility is not a major source of federal HAPs.
- 23b. 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 because the facility is not a major source of federal HAPs.

23c. 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 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 target federal HAPs. In addition, the facility does not spray apply coatings to metal or plastic substrates.

Recordkeeping Requirements

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

24a. VOC-containing materials include, but are not limited to, coatings, lacquers, thinners, stains, topcoats, solvents, adhesives, cleaning, and wash-off materials.

24b. The density and VOC content information must be supplied from CPDS or SDS provided by the manufacturer/supplier of the VOC-containing material.

Activity	Parameter	Units	Minimum Recording Frequency
Emission Unit Recordkeeping			
VOC-containing material CPDS or SDS	Each coating and solvent	NA	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
MAU natural gas usage	Natural gas combusted	Therms or cubic feet	Monthly
Woodworking activities' PM control system waste material sent off-site	Waste material sent off-site	BDT	Monthly
Spray booth filter particulate matter control efficiency	Control efficiency	%	Maintain documentation from each filter manufacturer
Spray booth filter replacement	Occurrence	NA	Upon Replacement
Spray booth training	Training logs / certifications	NA	Maintain documentation of training
Baghouse and cyclone maintenance	Occurrence	NA	As specified in O&M Plan
General Recordkeeping			
Complaints from the public	Log each complaint and the resolution	NA	Upon receipt
Upset log of all planned and unplanned excess emissions	See Condition G15	NA	Per occurrence

Reporting Requirements

25. 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 the supporting process information.	Annual	February 15
Emission Unit MAU natural gas usage.	Annual	February 15
Woodworking activities' control system waste material sent off-site.	Annual	February 15
A summary of maintenance and repairs performed on any pollution control devices at the facility.	Annual	February 15
A summary of complaints from the public and the resolution, as applicable.	Annual	February 15
The upset log information required by Condition G13 of the permit, if required by Condition G13.	Annual	February 15

26. 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

27. The draft permit was on public notice February 28, 2023 to April 3, 2023. Pursuant to OAR 340-216-0064(5)(a), issuance of a renewed Simple ACDP requires public notice as a Category III permit action 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.

No comments were received during the public comment period.

JJW/rr
04/07/2023

LIST OF ABBREVIATIONS THAT MAY BE USED IN THIS PERMIT

ACDP	Air Contaminant Discharge Permit		hazardous air pollutants
AQMA	Air Quality Management Area	MM	Million
ACS	Applied coating solids	MMBtu	Million British thermal units
Act	Federal Clean Air Act	MMCF	Million cubic feet
ASTM	American Society of Testing and Materials	NA	Not applicable
		NESHAP	National Emission Standards for Hazardous Air Pollutants
BDT	Bone dry ton		
Btu	British thermal unit	NO _x	Nitrogen oxides
CAM	Compliance Assurance Monitoring	NSPS	New Source Performance Standards
CAO	Cleaner Air Oregon		
CD ID	Control device identifier	NSR	New Source Review
CEMS	Continuous Emissions Monitoring System	O ₂	Oxygen
		OAR	Oregon Administrative Rules
CFR	Code of Federal Regulations	ODEQ	Oregon Department of Environmental Quality
CI	Compression Ignition		
CMS	Continuous Monitoring System	ORS	Oregon Revised Statutes
CO	Carbon Monoxide	O&M	Operation and maintenance
CO ₂	Carbon dioxide	SB	Lead
CO _{2e}	Carbon dioxide equivalent	PCD	Pollution Control Device
COMS	Continuous Opacity Monitoring System	PM	Particulate matter
		PM _{2.5}	Particulate matter less than 2.5 microns in size
CPDS	Certified Product Data Sheet		
CPMS	Continuous parameter monitoring system	PM ₁₀	Particulate matter less than 10 microns in size
		ppm	Parts per million
DEQ	Department of Environmental Quality	PSEL	Plant Site Emission Limit
dscf	Dry standard cubic feet	psia	pounds per square inch, actual
EF	Emission factor	PTE	Potential to Emit
EPA	US Environmental Protection Agency	QIP	Quality Improvement Plan
		RICE	Reciprocating Internal Combustion Engine
EU	Emissions Unit		
EU ID	Emission unit identifier	SACC	Semi-Annual Compliance Certification
FCAA	Federal Clean Air Act		
ft ²	Square foot	SCEMP	Surrogate Compliance Emissions Monitoring Parameter
FSA	Fuel sampling and analysis		
gal	Gallon	Scf	Standard cubic foot
GHG	Greenhouse Gas	SDS	Safety data sheet
gr/dscf	Grain per dry standard cubic feet (1 pound = 7000 grains)	SER	Significant emission rate
		SERP	Source emissions reduction plan
HAP	Hazardous Air Pollutants as defined by LRAPA title 12	SI	Spark Ignition
		SIC	Standard Industrial Code
HCFC	Halogenated Chlorofluorocarbons	SIP	State Implementation Plan
Hr	Hour	SO ₂	Sulfur dioxide
ID	Identification number or label	ST	Source test
I&M	Inspection and maintenance	TAC	Toxic air contaminant
Lb	Pound	TACT	Typically Achievable Control Technology
LRAPA	Lane Regional Air Protection Agency	TEU	Toxic Emission Unit
		TPY	Tons per year
MACT	Maximum Achievable Control Technology	VE	Visible emissions
MBF	Thousand board feet	VMT	Vehicle miles traveled
MERV	Minimum efficiency reporting values	VOC	Volatile organic compounds
		Year	A period consisting of any 12-consecutive calendar months
MFHAP	Metal fabrication or finishing metal		

Newood - 205808								
Emission Detail Sheets								
Facility Potential Emissions Summary								
Criteria Pollutant Emissions								
Emission Unit	PM (TPY)	PM10 (TPY)	PM2.5 (TPY)	SO2 (TPY)	NOx (TPY)	CO (TPY)	VOC (TPY)	GHGs (TPY)
4 Spray Booths	0.08	0.08	0.08	NA	NA	NA	3.85	NA
Woodworking	3.3E-03	3.3E-03	3.3E-03	NA	NA	NA	NA	NA
MAU	0.02	0.02	0.02	0.02	0.98	0.82	0.05	1,176
Total =	NA	NA	NA	NA	NA	NA	3.9	NA
FHAP/TAC Emissions								
Pollutant	CAS Number	Potential Emissions (lbs/yr)	Federal HAP	CAO Air Toxic				
Organics								
4,4'-Methylenebis(phenyl isocyanate)	101-68-8	6.55	Yes	Yes				
Acetaldehyde	75-07-0	0.18	Yes	Yes				
Acetone	67-64-1	1056	No	Yes				
Acrolein	107-02-8	0.11	Yes	Yes				
Benzene	71-43-2	0.33	Yes	Yes				
Benzo[a]pyrene	50-32-8	5.0E-05	Yes	Yes				
Cyclohexane	110-82-7	162.4	No	Yes				
Dibutyl phthalate	84-74-2	62.6	Yes	Yes				
Diethylene glycol butyl ether	112-34-5	1683	Yes	Yes				
Diethylene glycol ethyl ether	111-90-0	836	Yes	Yes				
Dipropylene glycol methyl ether	34590-94-8	152.5	No	Yes				
Epichlorohydrin	106-89-8	153.4	Yes	Yes				
Ethylbenzene	100-41-4	0.89	Yes	Yes				
Ethylene glycol	107-21-1	17.01	Yes	Yes				
Ethylene glycol butyl ether	111-76-2	1151	No	Yes				
Formaldehyde	50-00-0	0.71	Yes	Yes				
Isopropyl alcohol	67-63-0	156.4	No	Yes				
Methanol	67-56-1	48.8	Yes	Yes				
Methyl ethyl ketone	78-93-3	19.16	No	Yes				
Methyl isobutyl ketone	108-10-1	19.16	Yes	Yes				
Naphthalene	91-20-3	1.3E-02	Yes	Yes				
n-Hexane	110-54-3	31.40	Yes	Yes				
Propylene glycol methyl ether acetate	108-65-6	153.4	No	Yes				
Styrene	100-42-5	4.77	Yes	Yes				
Toluene	108-88-3	494	Yes	Yes				
Total PAHs (exc. Naphthalene)	-	4.2E-03	Yes	Yes				
Trimethylbenzenes	25551-13-7	1.44	No	Yes				
Xylene	1330-20-7	12.67	Yes	Yes				
Inorganic Gases								
Ammonia	7664-41-7	134	No	Yes				
Metals								
Aluminum hydroxide	21645-51-2	7.93	No	Yes				
Arsenic	7440-38-2	8.4E-03	Yes	Yes				
Barium	7440-39-3	0.18	No	Yes				
Beryllium	7440-41-7	5.0E-04	Yes	Yes				
Cadmium	7440-43-9	4.6E-02	Yes	Yes				
Chromium, Hexavalent	18540-29-9	5.9E-02	Yes	Yes				
Cobalt	7440-48-4	3.5E-03	Yes	Yes				
Copper	7440-50-8	3.6E-02	No	Yes				
Manganese	7439-96-5	1.6E-02	Yes	Yes				
Mercury	7439-97-6	1.1E-02	Yes	Yes				
Molybdenum Trioxide	1313-27-5	6.9E-02	No	Yes				
Nickel	-	8.8E-02	Yes	Yes				
Selenium	7782-49-2	1.0E-03	Yes	Yes				
Vanadium	7440-62-2	9.6E-02	No	Yes				
Zinc	7440-66-6	5.59	No	Yes				
Total Emissions (TPY) =		3.19		1.69	3.19			
Max Individual FHAP (TPY) =		1.26						
Notes:								

Newood - 205808							
Emission Detail Sheets							
Particulate Matter Emissions from Paint Booth Overspray							
65%	= Minimum Coating Transfer Efficiency						
98.00%	= Minimum Filter PM Removal Efficiency						
3.0	= Production Factor						
Manufacturer	Product Type	Product Code	2022 Spray Usage (lbs/yr)	PTE Usage (lbs/yr)	Volatiles (% wt.)	Solids (% wt)	PM PTE (TPY)
Sherwin-Williams	SHER_WOOD KEM AQUA Pigmented Lacquer	M64W551	20,679	62,037	63.5%	36.50%	159
Total PM Emissions (TPY) =							0.08
HAP/TAC Emissions			Oregon Toxic Air Contaminants				
Manufacturer	Product Type	Product Code	Aluminum hydroxide 21645-51-2		Zinc 7440-66-6		
			%Wt	Wt(lb)	%Wt	Wt(lb)	
Behr	Premium Plus Exterior Semi-Gloss Enamel Ultra Pure White	5050	5.00%	7.93	0.00%	0.00	
	Old World Mahogany Stain	SWM	0.00%	0.00	2.76%	4.37	
<i>Total (lbs/yr) =</i>				7.93		4.37	

Notes:
 2022 usage based on all products spray applied in the 4 spray booths which includes all water based lacquers and water based stains.
 Production factor based on 3 shifts of spray booth production. Normally, the facility operates on 1 shift of spray booth production.
 For PM emissions, assumes all sprayed material is SHER-WOOD KEM AQUA Pigmented Lacquer M64W551 - the highest solid content material used in 2022.
 HAP/TAC emissions assume the highest solid content spray applied material contains the highest content HAP/TAC compound.
 Minimum filter PM removal efficiency based on required control under 40 CFR 63 subpart HHHHHH (6H). Facility currently uses dry filters rated at 99.19%.

Newood - 205808						
Emission Detail Sheets						
Woodworking Emissions						
Production Factor =			1			
PM/PM₁₀/PM_{2.5} Emissions						
Max Throughput (BDT/yr)	Emission Factor (lbs/BDT)	Emissions (TPY)				
165	0.04	3.3E-03				
Notes:						
Emissions are based on DEQ Wood Products Emission Factors AQ-EF02 for baghouse control on cyclone-sanderdust						
Facility supplied max throughput factor based on their current 3 shift operation.						

Newood - 205808					
Emission Detail Sheets					
Makeup Air Unit					
Boiler Specifications					
Max Heat Input	4.9	MMBtu/hr			
Heat Value - Natural Gas	1026	MMBtu/MMCF			
Max Hrs Operation	4100	hr/yr			
Criteria Pollutants					
	NG Emission Factor	NG Emission Factor Units	Potential Hourly Emissions (lbs/hr)	Potential Annual Emissions (TPY)	
Pollutant					
PM/PM ₁₀ /PM _{2.5}	2.5	lbs/MMCF	0.01	0.02	
Carbon Monoxide	84	lbs/MMCF	0.40	0.82	
Nitrogen Oxides	100	lbs/MMCF	0.48	0.98	
Sulfur Dioxide	1.7	lbs/MMCF	0.01	0.02	
VOCs	5.5	lbs/MMCF	0.03	0.05	
GHGs (CO ₂ equiv.)	117	lbs/MMBtu	574	1,176	
HAP Emissions					
	NG Emission Factor	Potential Hourly Emissions (lbs/hr)	Potential Annual Emissions (lbs/yr)	Federal HAP	CAO Air Toxic
Pollutant	(lb/MMCF)				
Organics					
Acetaldehyde	4.30E-03	2.1E-05	0.18	Yes	Yes
Acrolein	2.70E-03	1.3E-05	0.11	Yes	Yes
Benzene	8.00E-03	3.8E-05	0.33	Yes	Yes
Benzo[a]pyrene	1.20E-06	5.7E-09	5.0E-05	Yes	Yes
Ethyl Benzene	9.50E-03	4.5E-05	0.40	Yes	Yes
Formaldehyde	1.70E-02	8.1E-05	0.71	Yes	Yes
Hexane	6.30E-03	3.0E-05	0.26	Yes	Yes
Naphthalene	3.00E-04	1.4E-06	1.3E-02	Yes	Yes
Total PAHs (exc. Nap.)	1.00E-04	4.8E-07	4.2E-03	Yes	Yes
Toluene	3.66E-02	1.7E-04	1.53	Yes	Yes
Xylenes	2.72E-02	1.3E-04	1.14	Yes	Yes
Inorganic Gases					
Ammonia	3.2	1.5E-02	134	No	Yes
Metals					
Arsenic	2.0E-04	9.6E-07	8.4E-03	Yes	Yes
Barium	4.4E-03	2.1E-05	0.18	No	Yes
Beryllium	1.2E-05	5.7E-08	5.0E-04	Yes	Yes
Cadmium	1.1E-03	5.3E-06	4.6E-02	Yes	Yes
Chromium, Hexavalent	1.4E-03	6.7E-06	5.9E-02	Yes	Yes
Cobalt	8.4E-05	4.0E-07	3.5E-03	Yes	Yes
Copper	8.5E-04	4.1E-06	3.6E-02	No	Yes
Manganese	3.8E-04	1.8E-06	1.6E-02	Yes	Yes
Mercury	2.6E-04	1.2E-06	1.1E-02	Yes	Yes
Molybdenum Trioxide	1.7E-03	7.9E-06	6.9E-02	No	Yes
Nickel	2.1E-03	1.0E-05	8.8E-02	Yes	Yes
Selenium	2.4E-05	1.1E-07	1.0E-03	Yes	Yes
Vanadium	2.3E-03	1.1E-05	9.6E-02	No	Yes
Zinc	2.9E-02	1.4E-04	1.21	No	Yes
Total =	3.36		140	4.92	140
GHG-Related Emission Factors					
	Natural Gas	GWP			
Pollutant	(kg/MMBtu)				
Carbon Dioxide (CO ₂)	53.06	1			
Methane (CH ₄)	1.0E-03	25			
Nitrous Oxide (N ₂ O)	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					
Non-metal toxic emission factors are based on SCAQMD AB 2588 - Default Emission Factors for Fuel Combustion, Table B-1					
Metal toxic emission factors are based on US EPA WebFIRE/AP-42 Section 1.4					
Chromium assumed to be hexavalent form					
Molybdenum assumed to be present as a trioxide compound					

