

REVIEW REPORT

Western Pneumatics, Inc.

110 N Seneca Road
 Eugene, Oregon 97402
 Website: <http://westernp.com/>

Permit No. 208929

Source Information:

SIC	3564
NAICS	333413

Source Categories (LRAPA Title 37, Table 1)	B.69: Surface coating operations C.4: Sources subject to a NESHAP C.7: PTE>10 ton/yr single HAP
Public Notice Category	II

Compliance and Emissions Monitoring Requirements:

Unassigned emissions	n
Emission credits	n
Compliance schedule	n
Source test date	n

COMS	n
CEMS	n
Ambient monitoring	n

Reporting Requirements:

Semi-annual reports (due dates)	July 31 January 31
SACC (due date)	n
Quarterly report (due dates)	n

Monthly report (due dates)	n
Excess emissions report	y
Other reports	n

Air Programs:

NSPS (list subparts)	n
NESHAP (list subparts)	A, XXXXXX
CAM	n
Regional Haze (RH)	n
Synthetic Minor (SM)	y
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	y

1. General Background

Western Pneumatics, Inc., was founded in 1982 and operates a facility that designs and manufactures wood and fiber material handling systems at 110 N Seneca Road, Eugene, Oregon. The fabrication of equipment and machinery includes the following activities: surface coating, milling, grinding and sandblasting. The facility operates approximately 4,160 hours per year (16 hours per day, 5 days per week and 52 weeks per year). The emission units (EU) regulated by the permit are the following:

Emission Unit	Emission Unit Description
EU-1	Paint Booth
EU-2	Baghouse 1
EU-3	Baghouse 2

During the previous permitting term, Addendum No. 2 was issued June 23, 2013, amending the permit to include the addition of a second baghouse, which has been incorporated into the permit through this permitting action.

2. Reasons for Permit Action and Fee Basis

The facility operates a process listed in LRAPA Title 37, Table 1 Part B.69 – Surface 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 and is, therefore, required to obtain a permit. This is an existing facility applying for a renewed permit as a Standard ACDP. Due to the facility's potential to emit above the Hazardous Air Pollutant (HAP) major source threshold, the facility must obtain a Standard ACDP as required in LRAPA Title 37, Table 1 Part C.7. The Lane Regional Air Protection Agency (LRAPA) has reviewed the permit renewal application received on November 17, 2015. The contents of the application and additional correspondence with the facility were the basis for the calculations and content within this review report. The primary reason for this permit action is to renew the expired permit.

3. Enforcement Actions

The facility received a Notice of Non-Compliance on October 25, 2012 for failure to maintain VOC and HAP rolling 12-month emissions calculations, failure to comply with NESHAP Subpart XXXXXX requirements, failure to maintain current Safety Data Sheets (SDS) or Certified Product Data Sheets of materials used, failure to submit semi-annual reports and failure to submit Notification of Construction/Modification forms. A Notice of Civil Penalty was received by the facility on December 11, 2012 for the aforementioned lack of submittal of Notification of Construction/Modification, referring to the installation of a Farr Baghouse without notifying LRAPA in writing. The fine was assessed as a Class III, Moderate Violation resulting in a \$700 civil penalty. On December 28, 2012, the facility requested a reduction of the civil penalty and affirmed that action had been taken to ensure compliance. The civil penalty was ultimately reduced to \$450, paid by the facility on January 13, 2013 and the file was closed.

4. Source Tests

No source testing has been performed at this facility and currently no source testing is required. Safety Data Sheets (SDS), Certified Product Data Sheets and material usage are used to determine the facility's VOC and HAP(s) emissions.

5. Typically Achievable Control Technology (TACT)

LRAPA 32-008 requires an existing emission unit at a facility to meet TACT if the emission unit meets the following criteria: the emissions of criteria pollutants are greater than five (5) tons per year of particulate or ten (10) tons per year of any gaseous pollutant, the emission unit is not subject to the emissions standards under LRAPA Title 30, Title 32, Title 33, Title 38, Title 39, or Title 46 for the pollutants emitted, and the facility is required to have a permit. The facility emits greater than ten (10) tons per year of VOC and is, therefore, required to meet TACT. While a formal TACT determination has not been conducted, LRAPA has determined that the air-assisted airless sprayers likely meet the TACT requirement for this facility.

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

Since the proposed PSEs for all regulated pollutants are below the Significant Emission Rates (SERs) in LRAPA Title 12, the facility is not subject to LRAPA's New Source Review (NSR) requirements for PM₁₀ nor the Prevention of Significant Deterioration (PSD) requirements for SO_x, NO_x, CO and VOC.

7. Hazardous Air Pollutants (HAP)

A major source is a facility that has the potential to emit 10 tons/yr or more of any single HAP or 25 tons/yr or more of combined HAPs. This source is not a major source of hazardous air pollutants because the facility does not currently emit HAPs above the major source levels and the facility has accepted PSEs for HAPs which limit its potential to emit to less than the major source levels, which are federally enforceable operational limits. The current potential to emit for HAPs were provided by the facility in the permit renewal application, with minor corrections made by LRAPA drawing information from the 2015 Annual Report, and are provided in the table below:

Hazardous Air Pollutant	Emissions (lbs/year)	Emissions (tons/year)
Ethyl Benzene	906	0.45
Glycol Ethers	113	5.66 x 10 ⁻²
Methanol	6.9	3.46 x 10 ⁻³
Styrene	8.6	4.30 x 10 ⁻³
Toluene	1022	0.51
Triethylamine	4.7	2.36 x 10 ⁻³
Xylene	3059	1.53
Total	5121	2.56

8. National Emission Standards for Hazardous Air Pollutants (NESHAP)

During the previous permitting term, Addendum No. 1 was issued on September 17, 2012, to include all applicable requirements of the 40 CFR 63 Subpart XXXXXX (“6X”) Metal Fabrication NESHAP, which were added to permit in Attachment B and have been incorporated into the permit through this permit action. The source is subject to NESHAP 40 CFR Part 63 Subpart 6X due to operation of the following source category: industrial machinery and equipment finishing operations. The Initial Notice and Notice of Compliance Status was received on September 26, 2012.

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

Pollutant	Baseline Emission Rate ¹	Plant Site Emission Limit (PSEL) ²			Increase from Baseline ³	SER
	(tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)	(tons/yr)	(tons/yr)
PM	0	0	0	0	0	25
PM ₁₀	0	0	0	0	0	15
PM _{2.5}	N/A	0	0	0	0	9
VOC	0	39	39	0	39	40
Single HAP	N/A	9	9	0	N/A	10
Total HAP	N/A	24	24	0	N/A	25

¹The Baseline Emission Rate is set at zero (0) tons per year for PM, PM₁₀, and VOC, since this facility was not in operation during the 1978 baseline year. A baseline emission rate is not required for PM_{2.5} in accordance with the definition of “baseline emission rate” in LRAPA Title 12.

²The facility has the potential to emit over the de minimis for VOC, Single HAP and Total HAP, so the proposed PSELs are included at the Generic PSEL as defined in LRAPA Title 12. No PSELs for PM, PM₁₀, or PM_{2.5} are set because the potential to emit is less than the de minimis level of one (1) ton per year for PM, PM₁₀, and PM_{2.5}. The plant site particulate matter emission calculation sheet is attached to this review report.

³The PSEL increase over the baseline is less than the SER, as defined in LRAPA Title 12 for all criteria pollutants, so no further air quality analysis is required.

10. Performance Standards and Emission Limitations

The facility is subject to the visible emissions standards in OAR 340-208-0110(4) and the particulate grain-loading standard in OAR 340-226-0210(b)(B) because DEQ adopted versions of these rules on April 16, 2015 that were determined to be more stringent than the existing LRAPA versions of these rules (LRAPA 32-010 and 32-015, respectively). The facility is subject to the highest and best requirement of LRAPA 32-005. Operation of well-maintained dust collectors should assure compliance with the grain loading and visible emissions limits. The permittee is also required to conduct inspections and maintenance of the equipment to assure compliance with the highest and best requirement.

The facility is subject to the PSEL rules in LRAPA 42-0040 and 42-0060. To assure compliance with the PSEL, detailed records are required to be maintained which demonstrate that the emissions of VOC and HAP(s) are below the established limits.

11. General Recordkeeping Requirements

A record of the following data is required to be maintained for a period of at least five (5) years at the facility:

Parameter	Minimum Recording Frequency
Estimation of VOC, total HAPs and single HAP emissions on a rolling 12-month basis	Monthly
Visual determination of fugitive emissions	Follow schedule specified in Subpart 6X
Visual determination of emissions opacity	Follow schedule specified in Subpart 6X
Amount of metal processed	Annually
Welding rod usage	Monthly
Baghouse inspections and maintenance	Upon occurrence
Upset log of all planned and unplanned excess emissions	Upon occurrence

12. General Reporting Requirements

A semi-annual report is due thirty-one (31) days after the end of each semi-annual reporting period. The first semi-annual reporting period is from January 1st through June 30th and the second semi-annual reporting period is from July 1st to December 31st. The report for the first semi-annual reporting period will include the rolling 12-month totals of VOC, total HAP and individual HAP and an upset log. The report for the second semi-annual reporting period will include the rolling 12-month totals of VOC, total HAP and individual HAP, an upset log, and the annual certification and compliance reports required under NESHAP Subpart 6X.

13. Public Notice

The draft permit will be on public notice from November 3, 2017 to December 7, 2017. 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 or hearing period.

KE/CMW
10/30/2017

Emission Estimations from Renewal Application and 2015 Annual Reporting

Chemical Name	Jan 10th, 2015	Feb 10th, 2015	March 10th, 2015	April 10th 2015	May 10th, 2015	June 10th, 2014	July 10th, 2015	Aug 10th, 2015	Sep 10th, 2015	Oct 10th, 2015	Nov 10th, 2015	Dec 10th, 2015	Total Annual HAPs ¹ (pounds)	Total Annual VOC (pounds)
ACETONE	449.50	195.75	406.00	203.00	174.00	366.45	239.25	290.00	311.75	369.75	355.25	355.25		3715.95 ²
AEROMATIC HYDROCARBONS	1.20	1.60	0.80	0.00	0.00	0.47	0.47	0.00	0.87	0.47	0.47	0.47		6.80
ALIPHATIC PETROLEUM DISTILLATES	120.18	57.03	65.68	40.95	54.52	79.82	66.17	81.61	92.95	112.21	52.17	84.60		907.88
BUTYL ACETATE/N-BUTYL ACETATE	33.97	40.39	114.38	0.00	0.92	5.64	14.13	4.59	30.76	12.29	71.06	14.82		342.94
BUTYL ALCOHOL/BUTANOL	47.18	56.10	77.78	0.00	1.28	0.00	16.58	6.38	42.08	14.03	7.65	10.20		279.23
ETHANOL	0.00	0.00	0.00	0.00	0.00	20.29	0.00	0.00	0.00	0.00	0.00	0.00		20.29
<i>ETHYL BENZENE</i>	102.83	73.36	148.81	27.78	34.75	59.27	51.42	63.12	84.00	85.18	111.76	63.89	906.18	906.18
<i>ETHELENE GLYCOL MONOBUTYL ETHER</i>	6.53	3.40	1.22	3.13	3.60	16.91	0.00	3.54	6.39	5.17	0.00	6.66	56.56	56.56
<i>ETHELENE GLYCOL MONOPROPYL ETHER</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2-ETHYLHEXYL ACETATE	0.00	0.00	34.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.24	3.52		80.08
<i>GLYCOL ETHER</i>	6.53	3.40	1.22	3.13	3.60	16.91	0.00	3.54	6.39	5.17	0.00	6.66	56.56	56.56
GLYCOL ETHER EB ACETATE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
HEXAMETHYLENE DIISOCYANATE	0.00	0.00	0.00	0.00	0.00	8.43	8.43	0.00	8.40	8.43	8.43	8.43		50.57
ISOBUTYL ALCOHOL	1.63	2.86	3.47	2.86	4.28	8.47	4.49	6.12	3.26	4.49	9.38	10.20		61.51
ISOBUTYL ACETATE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
ISOBUTYL ISOBUTYRATE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
ISOPROPYL ALCOHOL	59.64	32.34	35.03	32.55	33.27	42.29	135.57	39.95	70.22	80.96	55.35	43.32		660.48
<i>METHANOL</i>	0.00	0.00	0.00	0.00	0.00	6.92	0.00	0.00	0.00	0.00	0.00	0.00	6.92	6.92
METHYL ETHYL KETONE	27.20	0.00	27.30	27.20	13.60	22.77	28.93	20.40	20.40	28.93	15.33	15.33		247.37
<i>METHYL ISOBUTYL KETONE</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-METHOXY-2-PROPANOL ACETATE	0.00	0.00	0.00	0.00	0.00	0.47	0.47	0.00	0.00	0.47	0.47	0.47		2.34
MINERAL SPIRITS	37.93	37.02	33.36	10.26	15.54	30.57	8.89	13.18	35.56	26.37	3.03	25.67		277.37
MINERAL SPIRITS	31.45	37.40	109.09	0.00	0.85	0.00	11.05	4.25	28.05	9.35	68.46	12.08		312.03
PETROLEUM DISTILLATE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
PROPOXYPROPANOL	1.35	1.60	1.11	0.10	0.00	0.10	0.00	0.00	0.40	0.00	0.05	0.00		4.71
<i>STYRENE</i>	1.21	0.62	0.64	0.50	0.53	0.02	0.64	0.75	0.84	1.14	0.76	0.93	8.60	8.60
<i>TOLUENE</i>	153.59	174.14	274.86	4.25	9.39	21.31	55.82	26.90	136.10	53.12	69.96	42.71	1022.15	1022.15
1,2,3 TRIMETHYLBENZENE	12.72	16.96	10.78	0.00	0.00	2.19	1.04	0.00	4.71	1.04	1.04	1.04		51.53
1,2,4 TRIMETHYLBENZENE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
<i>TRIETHYLAMINE</i>	1.35	1.60	1.11	0.10	0.00	0.10	0.00	0.00	0.40	0.00	0.05	0.00	4.71	4.71
VM&P NAPHTHA	102.39	40.57	58.75	31.79	40.06	59.56	58.40	68.94	72.79	87.57	46.53	63.62		730.97
<i>XYLENE</i>	339.60	209.73	408.26	112.95	137.81	249.85	187.86	250.71	271.54	320.80	339.87	230.38	3059.36	3059.36
Total Pounds:													5121.03	9157.11
Total Tons:													2.56	4.58

¹NOTE: HAP compounds are denoted in bold and italics.

²NOTE: Acetone is an exempt VOC and is not included in the total annual VOC calculation.

Abrasive Sand Blasting Emissions				
Abrasive Sand Usage (lb/yr) ¹	Pollutant	Emission Factor (lb/1000 lb abrasive) ²	Uncontrolled Emissions (ton/yr)	Controlled Emissions ³ (ton/yr)
117,000	PM	27	1.58	0.158
	PM ₁₀	13	0.76	0.076
	PM _{2.5}	1.3	0.08	0.008

¹NOTE: Abrasive sand usage provided by the facility in the 2016 Annual Report.

²NOTE: Emission factor obtained from AP-42 Table 13.2.6-1 Particulate Emission Factors for Abrasive Blasting.

³NOTE: Assumed 90% control efficiency with the use of a total enclosure with negative pressure and filters, which is the normal operating scenario for the facility.

Welding PM ₁₀ Emissions				
Welding Rod Type	Usage (lbs) ¹	Emission Factor (lb/1000 lb electrode consumed) ²	Emissions (lb/year)	Emissions (ton/yr)
Stainless Steel	4455	24.1	107.4	0.054
Mild Steel	5016	24.1	120.9	0.060

¹NOTE: Welding rod usage provided by the facility in the 2016 Annual Report.

²NOTE: Emission factor obtained from AP-42 Table 12.19-1 PM-10 Emission Factors for Welding Operations for GMAW (Gas Metal Arc Welding), using the highest emission factor listed.

Total Particulate Emissions ¹		
Pollutant	lb/yr	ton/yr ²
PM	544	0.27
PM ₁₀	380	0.19
PM _{2.5}	243	0.12

¹NOTE: Total particulate emissions calculated using the controlled emissions from the sandblasting operations and assuming 100% of PM₁₀ emissions calculated for the welding process are PM_{2.5} emissions.

²NOTE: Emissions are under the de minimis value of one (1) ton per year. No PSEs for particulate matter (PM), PM₁₀ or PM_{2.5} are required.