Proposed Statement of Basis for Western Pneumatic Tube Company Initial AOP December 10, 2024

1 Purpose of this Statement of Basis

1.1 General

This document summarizes the legal and factual bases for the permit conditions in the Western Pneumatic Tube Company (Western Pneumatic) air operating permit to be issued under the authority of the Washington Clean Air Act, Chapter 70A.15 Revised Code of Washington, Chapter 173-401 of the Washington Administrative Code and Puget Sound Clean Air Agency (PSCAA) Regulation I, Article 7. Unlike the permit, this document is not legally enforceable. It includes references to the applicable statutory or regulatory provisions that relate to Western Pneumatic's emissions to the atmosphere. In addition, this Statement of Basis provides a description of the facility's activities and a compliance history.

2 Why Western Pneumatic is an Air Operating Permit Source

Western Pneumatic previously operated as a major source of HAP when the facility was using a trichlorethylene vapor degreaser. The original air operating permit was issued in 2002 and was in the renewal process when the facility replaced the trichloroethylene vapor degreaser with a vapor degreaser using an n-propyl bromide solvent. At that time, n-propyl bromide was not a listed HAP.

As of February 4, 2022, 1-Bromopropane (n-propyl bromide) is listed as a hazardous air pollutant (HAP) by the Environmental Protection Agency (EPA). Since actual and potential emissions of n-propyl bromide are above major source thresholds of 10 tons/year for a single HAP, Western Pneumatic became a major source with the listing of n-propyl bromide and was required to submit a complete air operating permit application by February 4, 2023. Potential emissions of criteria pollutants are below major source thresholds of 100 tons/year.

3 Source Description

Western Pneumatic is a is a custom producer of welded metal tubing made from stainless steel, nickel, titanium, and aluminum alloys. The facility started producing tubes in 1952. This high specification tubing is manufactured for structural, hydraulic, and pneumatic systems in a wide variety of applications, from submersible pumps to aircraft and spacecraft components.

Western Pneumatic's raw materials (metal alloys) are received in sheet form. These flat or coiled sheets are trimmed (slit) to size, formed and welded on one of several tungsten-inert gas shielded arc welding lines. The sheet edges are fused together by heat. The welded tubing is further refined by drawing, degreasing, annealing, and pickling. These processes are described below.

- Drawing is a metal working operation that precisely sizes tube wall thickness and diameter. The tubes are coated with a lubricant prior to drawing to assist in the drawing process.
- Degreasing is necessary for tubes that have been through the drawing process and have a coating of lubricant. Degreasing is conducted in the vapor degreaser.
- Annealing is conducted in a 5 MMBtu/hr atmospheric, natural gas furnace. Tubing which

has been cold-worked is passed through seven in-line furnace “barrels,” or cells, to soften the metals for further work.

- Pickling is necessary to remove the metal oxide/hydroxide scale formed on tubes during annealing. Annealed tubes are bathed in pickling tanks containing a solution of nitric acid, hydrofluoric acid, and water. Nickel tubes are pre-soaked in a tank containing a solution of potassium permanganate, sodium hydroxide, and water. There are two tanks (one 800 gallon and one 1000 gallon) containing the acidic pickling solution, and one tank (800 gallons) containing the potassium permanganate solution.

4 Responsible Official and Site Contacts

The Agency reviewed the Responsible Official definition in WAC 173-401-200(29) with the applicant. Simon Prior, Aerospace Group President, and Craig Fery, General Manager, both have responsibility of the overall operation at the facility.

Site Contact:

Alan Haake
Telephone No.: (425) 889-7626
E-mail: alan.haake@leggett.com

5 Permitting History

5.1 New Source Review Permitting for the Facility

Notice of Construction Minor New Source Review

All active Orders of Approval that apply to this facility are included as an attachment to this Statement of Basis.

Vapor Degreaser Operations:

Order of Approval No. (OA) 3364 (obsolete) was issued on January 10, 1990, for the installation of one vapor degreaser using trichloroethylene solvent. This OA became obsolete when this vapor degreaser was removed from service and replaced with the degreaser authorized under OA 9636

OA 9636 (cancelled) was issued on August 9, 2007 for a new degreaser using a stabilized n-propyl bromide solvent. At the time of issuance, n-propyl bromide was not a listed HAP or toxic air pollutant (TAP) listed in WAC 173-460-173, but it was permitted as a VOC. The OA was cancelled and superseded by OA 11987.

OA 11987 was issued on November 6, 2020 when the facility requested a modification to their existing OA 9636 to include VOC limits in their OA. WAC 173-400-111(8) was used to add a limit since the change in conditions would not result in an exceedance of an emission standard, no ambient air quality standard would be exceeded as a result of the change, the change would not adversely impact the ability of the Agency to determine compliance with an emission standard, the revised order would continue to require BACT, and the revised order met the applicable WAC requirements listed in WAC 173-400-111(8)(a). VOC emissions associated with the vapor degreaser were limited to 70 tons during any consecutive 12-month period. This OA cancelled and superseded OA 9636.

Tube Grinding/Dust Collectors

OA 8549 (cancelled) was issued on September 28, 2001 for two baghouses that were installed in 2002. One baghouse is rated at 1,500 cfm controls emissions from the tube grinding process and is still in place. A second baghouse rated at 2400 cfm baghouse was found to be oversized for the operation which it was performing and was replaced by a 1,000 cfm baghouse. At the time, it was determined that permitting was not required. This OA was cancelled and superseded by OA 12153.

OA 12153 was issued on September 17, 2021 for one Air Flow Systems baghouse rated at 2,400 cfm and one DC Mill baghouse rated at 1,500 cfm used to control particulate matter emissions from metal tube cutting operations, including stainless steel. Both baghouses were previously permitted to operate under Order of Approval No. 8549. This Order of Approval was issued for alteration of the DC Mill baghouse to upgrade filters with a charcoal MERV 15 filter system to address potential odor issues. This OA cancelled and superseded OA 8549.

Sub-slab Depressurization System

OA 12103 (cancelled) was issued on May 12, 2021 for one sub-slab depressurization system serving as an interim remedial action to mitigate indoor vapor intrusion of chlorinated compounds in soil and groundwater. This project includes five shallow vapor wells equipped with two granulated activated carbon adsorption vessels (400 pounds of carbon each) in series that are used to treat the contaminated vapors before being released into the atmosphere. This OA was cancelled and superseded by OA 12201.

OA 12201 was issued on January 7, 2022 for the sub-slab depressurization system to modify the project description and the flow rate of the system. This OA cancelled and superseded OA 12103.

Other Equipment

Other equipment at the facility was determined not to need permitting under PSCAA Regulation I, Article 6. This was either because the equipment was installed prior to the Agency being established or because it was determined to be exempt from permitting requirements.

Prevention of Significant Deterioration (PSD) permit PSD-

The facility is not an existing PSD major source and no PSD permits have been issued at the facility.

5.2 Regulatory Orders Issued to the Facility

No regulatory orders have been issued to the facility.

5.3 Operating Permit Issuance

Western Pneumatic previously operated as a major source of HAP when they were using a trichlorethylene vapor degreaser. The original air operating permit was issued in 2002. On August 22, 2007, the Agency notified the facility that they were proposing to revoke Air Operating Permit 20100 at the request of the permittee. The Agency acknowledged that with the discontinued use of trichloroethylene, Western Pneumatic would no longer be considered a major source and would not need an air operating permit. The revocation became final on September 21, 2007.

As of February 4, 2022, 1-Bromopropane (n-propyl bromide) was listed as a hazardous air pollutant (HAP) by EPA. Since actual and potential emissions of n-propyl bromide are above

major source thresholds of 10 tons/year for a single HAP, Western Pneumatic became a major source with the listing of n-propyl bromide and was required to submit a complete air operating permit application by February 4, 2023.

6 Compliance History

Onsite inspections of the facility have occurred annually since the issuance of the original operating permit in 2002. The inspection performed in 2021 were conducted via telephone due to the COVID-19 measures to protect agency and Western Pneumatic's employees. Onsite inspections resumed in 2022, occurring annually, and the most recent onsite inspection for the facility was completed February 23, 2024.

The facility has received the following Notices of Violation or written warnings:

On July 19, 2019, a written warning was issued for failure to operate and maintain equipment in good working order. The facility was unable to completely close the vapor degreaser lid. The facility contact responded within 1 week that corrective action was taken, and the case was closed.

On May 17, 2022, a written warning was issued for an open container collecting was solvent from the vapor still as required by OA 11987, Condition 13. The facility contact responded within 1 week that corrective action was taken, and the case was closed.

On January 3, 2023, a written warning was issued for not marking the acceptable pressure drop range for the Air Flow Systems baghouse as required by OA 12153, Condition 4. The facility contact responded within 1 week that corrective action was taken, and the case was closed.

On February 13, 2024, a Notice of Violation was issued based on a self-reported deviation of OA 12201, Conditions 5 and 6 for VOC control requirements on the sub-slab depressurization system. Corrective action was provided in the report.

7 Potential to Emit and Actual Emission Inventories

The facility's potential to emit (PTE) of criteria pollutants was reviewed under Notice of Construction 11987:

Emissions Source	PM_{10} $PM_{2.5}$	NOX	SOX	CO	VOC	Lead
Welding	No Emissions from Gas Tungsten Arc Welding (GTAW)					
Planishing	No Emissions from Planishing					
Vapor Degreaser		-	-	-	134	
Misc. Solvent & Draw Lube Emissions					18	
Sub Slab Depressurization System		-	-	-	3.36	
Natural Gas Combustion	0.28	3.66	0.02	3.07	0.20	
HF&HNO3 Pickling	3	-	-	-	-	
KMnO4 Cleaning	1	-	-	-	-	
Do-All Saw	1					
DC Mill Cutoff Saw	1	-	-	-	-	
ME Cutoff Saw	0	-	-	-	-	
Cambelmatic Cutoff Saw	0	-	-	-	-	
X-Ray Dust Collector	0	-	-	-	-	
Fluorescent Penetrant	No Emissions from Fluorescent Penetrant					
Cooling Towers	0.0	-	-	-	-	
Totals (Tons/yr.)	***6.4***	***4***	***0***	***3***	***156***	***-***

OA 11987 limited VOC emissions associated with the vapor degreaser to 70 tons/year or less which reduced facility-wide potential emissions of VOC emissions below the major source thresholds. A majority of the VOC emissions are associated with n-propyl bromide which is now listed as a HAP (vapor degreaser operations). Pickling tank emissions are hydrofluoric acid (HAP) and nitric acid. VOC emissions from the sub-slab depressurization system are insignificant at less than 2 lb./yr.

The table below summarizes Western Pneumatic facility's actual air emissions for the most recent available 5 years. Emission inventories are estimates of actual emissions from the facility developed by the permittee and submitted to the Agency annually. Emissions will vary from year to year depending on the facility operation.

Emission Inventory Summary (tons per year)

Pollutant	2018	2019	2020	2021	2022
HAP*	--	--	--	--	36
VOC	52	57	34	27	38

*Note that the majority of HAP reported is n-propyl bromide which was not a listed HAP until February 4, 2022.

8 Compliance Assurance Monitoring, NESHAP and NSPS Applicability Review

8.1 Compliance Assurance Monitoring

The Compliance Assurance Monitoring (CAM) rule requires owners and operators to monitor the operation and maintenance of their control equipment, so they can evaluate the performance of their control devices and ensure they are working properly. The CAM rule applies at major sources with emission units that have control devices and emissions could exceed 100 tons per year of criteria air pollutant or 10 tons per year single HAP or 25 tons per year total HAP if the control device was not operated. The CAM rule defines a major source using the definition in the Part 70 regulations at 40 CFR 70.2. The three types of major sources in Part 70 are:

- Major HAP sources – sources that emit 10 tpy or more of a single HAP or 25 tpy or more of all HAPs combined.
- Major air pollutant source – sources that have the potential to emit 100 tpy or more of any air pollutant subject to regulation
- Major source in nonattainment areas – sources with specified potential to emit of certain pollutants in nonattainment areas.

For emission units with baghouses as control equipment, potential emissions post-control device are based on grain loading limits in minor new source review permits or regulation and the flow rate of the equipment, assuming 8760 hours of operation per year. Potential pre-control device emissions are based on the anticipated or permitted control efficiency of the control device. This likely overestimates potential pre-control emissions but calculations demonstrate potential pre-control device emissions are less than the major source threshold and therefore CAM does not apply in accordance with 40 CFR 64.2(a)(3).

The vapor degreaser was permitted in 2007. Potential emissions were estimated to be approximately 40 tons per year based on previous solvent usage with a different solvent and pro-rating actual emissions to 8760 hours per year. At the time of permitting, n-propyl bromide was not a listed HAP. Best available control technology was based on feasible technology and work practice standards to minimize emissions. This included use of a cover, high freeboard ratio, a refrigerated freeboard chiller to cool temperatures above the vapor zone in the degreaser, safety switches and thermostats, limited hoist speed to reduce entry speed of parts and proper handling of solvent. At the time of issuance, there was no emission limit established in the permit. Based on review of AP-42, the combined system identified as BACT would result in between 30-75%, but 15-40% was attributable to operating procedures. This is consistent with review of Air & Waste Management's Air Pollution Engineering Manual which indicated similar control levels with a system of controls.

In 2020, Western Pneumatic submitted an application requesting a limit of VOC emissions in accordance with WAC 173-400-111(8). It was recognized that the potential emissions were not accurately assessed in the original permit review. The assumption that usage of trichloroethylene in the old degreaser and n-propyl bromide in the new degreaser would be equivalent was not supported. In addition, prorating of hours did not accurately reflect potential emissions from a degreaser. Using the emission factor of 0.15 lb/hr-ft^2 in Table 4.6-2 in EPA's AP-42, potential emissions are estimated at 102 tons per year. In Order of Approval No. 11987, VOC emissions associated with the vapor degreaser operation were limited to 70 tons in any consecutive 12-month period.

Because of this emission limit, the Agency reviewed control strategies to determine if CAM applied. The use of a refrigerated freeboard chiller to maintain a cool air blanket above the vapor zone was evaluated, but it was determined this was part of a larger control system consisting of both equipment and work practices. To demonstrate compliance with the emission limit, Western Pneumatic is required to use a material balance method and calculate emissions monthly. There is no assumed control efficiency of the refrigerated chiller. Therefore, the Agency determined that the use of the refrigerated freeboard chiller would not meet the criteria in 40 CFR 64.2(a)(2) and additional monitoring of the refrigerated freeboard chiller is not required under CAM. OA 11987 does require routine monitoring of the chilled air blanket temperature measured at the center of the air blanket to verify compliance with the temperature limit established in the Order. This is consistent with NESHAPs for similar sources (40 CFR Part 63, Subpart T) and is adequate to ensure the refrigerated freeboard chiller is maintained in good working order.

The Agency concludes CAM does not apply to operations at this facility as summarized in the table below.

CAM Applicability Summary

EU ID and Description	CAM Regulated Pollutant	Pre-Control PTE (tpy)	Post-Control PTE (tpy)	Control Device	Emission Limit(s)	Regulatory Citation	CAM Applies?
EU 1: Vapor Degreaser	VOC HAP	102	<70	Freeboard chiller	70 tons during any consecutive 12-month period	OA 11987	No; Does not meet applicability in Section 64.2(a)(2) per discussion above
EU 2: Tube Cutting Operations	Opacity Particulate Matter	9.0	<1	Air Flow Systems Baghouse rated at 2400 cfm	20% opacity for a period or periods aggregating more than 3 minutes in any hour 0.05 gr/dscf from equipment used in manufacturing process	PSCAA Regulation I 9.03 PSCAA Regulation I 9.09	No; pre-control PTE below 100 TPY

EU ID and Description	CAM Regulated Pollutant	Pre-Control PTE (tpy)	Post-Control PTE (tpy)	Control Device	Emission Limit(s)	Regulatory Citation	CAM Applies?
	Opacity Particulate Matter	33.8	1.7	Other dust collector rated at 900 cfm (exempt from permitting)	20% opacity for a period or periods aggregating more than 3 minutes in any hour 0.05 gr/dscf from equipment used in manufacturing process	PSCAA Regulation I 9.03 PSCAA Regulation I 9.09	No; pre-control PTE below 100 TPY
	Opacity Particulate Matter	5.6	<1	DC Mill Baghouse rated at 1500 cfm	20% opacity for a period or periods aggregating more than 3 minutes in any hour 0.005 gr/dscf from equipment used in manufacturing process 99% control efficiency on particulate	PSCAA Regulation I 9.03 OA 12153, Condition 9 OA 12153, Condition 8	No; pre-control PTE below 100 TPY
EU-3: Pickling Tanks	Opacity Particulate Matter	<3	N/A	None	20% opacity for a period or periods aggregating more than 3 minutes in any hour 0.05 gr/dscf from equipment used in manufacturing process	PSCAA Regulation I 9.03 PSCAA Regulation I 9.09	No, no control device
EU-4 Annealing Furnace	Opacity Particulate Matter	<1	N/A	None	20% opacity for a period or periods aggregating more than 3 minutes in any hour 0.05 gr/dscf from equipment used in manufacturing process	PSCAA Regulation I 9.03 PSCAA Regulation I 9.09	No, no control device
EU-5 Boiler	Opacity Particulate Matter	<1	N/A	None	20% opacity for a period or periods aggregating more than 3 minutes in any hour 0.05 gr/dscf from equipment used in manufacturing process	PSCAA Regulation I 9.03 PSCAA Regulation I 9.09	No, no control device
EU-6 Sub-slab depressurization system	TCE VOC	<1	<1	Carbon adsorption	90 or 95% control efficiency or <= 10 ppmv at outlet	OA 12201, Condition 5	No; pre-control PTE below 100 TPY

EU ID and Description	CAM Regulated Pollutant	Pre-Control PTE (tpy)	Post-Control PTE (tpy)	Control Device	Emission Limit(s)	Regulatory Citation	CAM Applies?
EU-7 Storage tank	Not applicable	<1	N/A	None	Not applicable	Not applicable	No, no control device

8.2 NESHAP: National Emission Standards for Halogenated Solvent Cleaning

40 CFR Part 63, Subpart T applies to individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5) or chloroform (CAS No. 67-66-3), or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent. It does not apply to operations at Western Pneumatic since n-propyl bromide is not a regulated solvent under this NESHAP.

40 CFR Part 63, Subpart CCC applies to steel pickling facility that pickle carbon steel using hydrochloric acid solution that contains 6% or more by weight hydrochloric acid and is at a temperature of 100 F or higher. It does not apply to Western Pneumatic since they do not use hydrochloric acid in their pickling tanks.

40 CFR Part 63, Subpart DDDDD establishes emission limitations and work practice standards for HAP emitted from industrial, commercial, and institutional boilers and process heaters located at major sources of HAP. The regulation applies to Western Pneumatic since they operate one industrial boiler and Western Pneumatic is a major source of HAP. The boiler fires on natural gas so meets the definition of units designed to burn gas 1 and has a heat input capacity less than or equal to 5 MMBtu/hr. Applicable requirements are contained in Table 6 of the permit. The boiler was installed in 2016 so is considered a new boiler and not subject to the energy assessment requirements.

8.3 NSPS Applicability

As part of the application process, the Agency reviewed federal New Source Performance Standards (NSPS) that might apply to this facility to determine applicability. No NSPS apply.

9 Applicable Requirements

9.1 Emission Unit Summary Table

An emission unit summary table is included in this permit before Section 1. This table gives a general description of the emission units at the facility. The table is reproduced below and lists the emission units regulated under this permit located at the facility. The information in the table is for informational purposes only.

Source	Description	Emission Control Equipment or Method	Install Date	Rated Capacities
EU 1 Vapor Degreaser	Vapor degreaser using a stabilized 1-Bromopropane solvent	Freeboard refrigeration device, >1 freeboard ratio, cover	OA 11987 2007	155 square feet
EU 2 Tube Cutting Operations	Cutting and grinding of tubes including stainless steel tubes.	NOC 12153 Baghouses installed in 1989 and 2002. One baghouse modified in 2021.	1962	Three dust collectors rated at 900 cfm, 1,500 cfm, and 2,400 cfm.
EU 3 Pickling and Cleaning Operations	Two pickling tanks using a solution of hydrofluoric acid and nitric acid for cleaning tubes of nickel and stainless steel. One potassium permanganate tank used to soak nickel tubes prior to acid cleaning	None	1978	Pickling tanks: 1,040 gallons and 800 gallons Potassium permanganate tank: 720 gallons
EU 4 Atmospheric Annealing Furnace	One Natural gas fired furnace	None	1962	5 MMBtu/hr
EU 5 Boiler Operations	One Natural gas fired boiler	None	2016	1 MMBtu/hr
EU 6 Sub-slab depressurization System	A sub-slab depressurization system serving as an interim remedial action to mitigate indoor vapor intrusion of chlorinated compounds in soil and groundwater.	Activated carbon adsorption (minimum of two activated carbon vessels in series)	OA 12201 2021	85 cfm
EU 7 Storage Tanks	One 3,000 gallon storage tank for storing degreaser solvent	None	Various	Various

9.2 Requirement Tables and Compliance Methods

Section 1 of the AOP includes all facility-wide requirements and is structured so that applicable emission limits are found in Table 1, followed by Compliance Methods associated with the limits. Compliance methods listed in the applicable requirements table are permit conditions listed below the tables. The compliance methods include monitoring, recordkeeping, and reporting obligations specific to the requirement that will be used by the permittee in determining if they are in continuous or intermittent compliance. In some cases where the applicable requirement has little or no ongoing monitoring requirements, monitoring has been added. This is called "gapfilling" and is authorized under WAC 173-401-615(1)(b).

Whenever the Puget Sound Clean Air Agency uses a "gap-filling" monitoring method, we determine the monitoring frequency using criteria contained in EPA's April 30, 1999 Draft *Periodic Monitoring Technical Reference Document*. We consider "the five criteria" in determining how often the facility should perform a monitoring activity: hourly, once per shift, daily, weekly, monthly, quarterly, annually, or once per five-year permitting period. The five criteria are initial compliance, margin of compliance (monitoring method designed so source will identify potential problems early and take action before a violation occurs), variability of process and emissions, environmental impacts of problems, and other technical considerations.

10 Facility-wide Emission Limits and Requirements

10.1 Section 1.A General Facility-Wide Emission Limits

10.1.1 RACT Requirements

PSCAA Regulation I, Section 3.04 establishes reasonably available control technology (RACT) requirements. There is no monitoring required. Condition 6.19 of the permit specifies that in accordance with WAC 173-401-605(3), emission standards and other requirements contained in rules or regulatory orders in effect at the time of this operating permit renewal shall be considered RACT for purposes of permit renewal.

10.1.2 PSCAA Regulation I Article 9 & WAC 173-400-040 Emission Standards

The facility-wide emission limits include emission standards from PSCAA Regulation I Article 9 for opacity and particulate matter. The manufacturing activities at the facility are not expected to result in visible emissions or particulate emissions in excess of the standard grain loading as the grinding operations are equipped with dry filters with at least 95% particulate removal efficiency and other operations would not be expected to have a particulate loading above the standard. Under OA 12153, the permittee has additional required emission unit specific inspections to verify the dust collectors are operated and maintained in good working order (Conditions 2.23 and 2.25 of the permit). Therefore a facility-wide monthly check for visible emission is selected as the monitoring method for both the opacity and particulate matter standards.

Monthly facility-wide inspections and complaint response are selected as the monitoring method for PSCAA Regulation I Article 9 and WAC 173-400-040 precautions to prevent release of fugitive dust emissions, the nuisance standard of PSCAA Regulation I 9.11 and WAC 173-400-040, the fallout standard of WAC 173-400-040, and the PSCAA Regulation 9.20 requirement for maintenance of equipment. The facility is also required to conduct additional weekly odor monitoring outside the building for grinding operations controlled by the DC Mill Baghouse in accordance with OA 12153 (Condition 2.25 of the permit), with additional language added to the permit to assure monitoring is sufficient in accordance with WAC 173-401-630(1) . Therefore, a

facility-wide monthly inspection to determine general state of compliance with applicable requirements, inspection for odor bearing and nuisance contaminants and evaluations of general effectiveness of the O&M Plan was determined to be sufficient. For complaints, the permit requires the facility to have a complaint response plan in place with prompt response to any complaints received.

PSCAA Regulation I, Section 9.07, Sulfur Dioxide Emission Standard, limits sulfur dioxide emissions to 1,000 ppmvd (corrected to 7% oxygen for fuel burning equipment). The facility only burns pipeline quality natural gas. The Agency maintains documentation showing that based on the amount of sulfur in pipeline natural gas in Washington, it is estimated that emissions from combusting natural gas would result in an exhaust emission of approximately 0.5 ppmdv which is less than one-tenth of one percent of the 1,000 ppmdv standard.

PSCAA Regulation I, Section 9.10, Emission of Hydrochloric Acid, specifies that hydrochloric acid emissions shall not exceed 100 ppm (dry) corrected to 7% O_2 for combustion sources, including both internal and external combustion units. Since Western Pneumatic burns only pipeline-grade natural gas, the facility is incapable of violating the standard while complying with the other requirements in the permit. Therefore, the permit does not contain additional monitoring requirements.

PSCAA Regulation I, Section 9.20(b) requires Western Pneumatic to maintain equipment or control equipment not subject to Section 9.20(a) in good working order. Section 9.20(a) applies to sources that received a Notice of Construction Order of Approval under PSCAA Regulation I, Article 6. Since it applies to specific emission units, Section 9.20(a) requirements are included in Section 2 of the permit. PSCAA Regulation I, Section 7.09(b) is the requirement to develop and implement an O&M Plan to assure continuous compliance with PSCAA Regulations I, II, and III. The requirement specifies that the Plan shall reflect good industrial practice, but does not define how to determine good industrial practice. To clarify, the Agency has added to Condition 1.18 that good industrial practices may include following the manufacturer's operations manual or an equipment operations schedule, minimizing emissions until the repairs can be completed and taking measures to prevent recurrence of the problem. The facility-wide inspections provide monitoring of the general effectiveness of the facility's O&M Plan. This general monitoring and compliance with the O&M Plan provides sufficient monitoring criteria to certify that the equipment has been maintained in good working order. However, PSCAA reserves the right to evaluate the maintenance of each piece of equipment to determine if it has been maintained in good working order.

10.1.3 PSCAA OA 11987 Condition 4

OA 11987 limits emissions of VOCs from the vapor degreaser operations, but Condition 4 applies facility-wide in that it requires the permittee to calculate and record actual VOC emissions from activities at the facility and notify the Agency in writing if emissions for the previous calendar year exceed 90 tons. This was intended to provide a mechanism to identify if the facility operations were increases so that the facility may be a major source of VOCs and need an operating permit. However, since n-propyl bromide is now a listed HAP, this condition is no longer needed. However, since it is in an OA, it remains an enforceable requirement. The annual emission reporting requirements already require the permittee to calculate and report actual emissions so Condition 6.20, Emission Reporting, has been identified as the compliance method.

11 Emission Unit Specific Applicable Requirements

11.1 Requirements that Apply to Emission Unit No. 1 (Vapor Degreaser)

Table 2 list applicable requirements that apply to the vapor degreasing operation. The monitoring, recordkeeping and reporting requirements are specified in OA 11987. The gap-filling provisions in WAC 173-401-615(1)(b) were used to clarify the recordkeeping requirements for the required monthly inspections.

PSCAA Regulation I, Section 9.20(a) is an applicable requirement since the degreaser is permitted under OA 11987 and the requirement specifies that equipment permitted under PSCAA Regulation I, Article 6 must be maintained in good working order. The agency has used gap-filling provisions in WAC 173-401-615(1)(b) to specify monitoring sufficient to demonstrate compliance with this provision. This includes the facility-wide inspections, the requirement to implement an O&M Plan, and the requirements associated with maintenance and repair of emission units.

11.2 Requirements that Apply to Emission Unit No. 2 (Tube Cutting Operations)

Table 3 list applicable requirements that apply to the tube cutting operations. There are three baghouses associated with the tube cutting process, but one was exempt from permitting under PSCAA Regulation I, Article 6 because of the size of the unit. OA 8549 was issued for two baghouses that were installed in 2002. The operation associated with emission unit two is described below:

A coil of metal is unwound and sent through a series of operations in order to round it. The material is then welded together at the edges. When the tube reaches the desired length, it triggers a switch to activate the cutting wheel and the baghouse exhaust fan. The cutting operation grabs the tube and cuts it while the welding continues. When the cut is complete, the cutting wheel is returned to a start position and the exhaust fan runs for a few more seconds before shutting down. The cut off tube is then moved out of the way, deburred and set aside for future processing.

In 2021 in response to odor complaints, the facility proposed to modify the existing DC Mill baghouse to upgrade the filter with a charcoal MERV 15 filter system. OA 12153 was issued to address this modification, but both baghouses were included since the previous OA had included both baghouses. OA 12153 cancelled and superseded OA 8549. The Air Flow Systems baghouse was not modified.

The monitoring, recordkeeping and reporting requirements are specified in OA 12153. The gap-filling provisions in WAC 173-401-615(1)(b) were used to clarify the recordkeeping requirements for the required monthly inspections.

PSCAA Regulation I, Section 9.20(a) is an applicable requirement since the tube cutting operations and control equipment are permitted under OA 12153 and the requirement specifies that equipment permitted under PSCAA Regulation I, Article 6 must be maintained in good working order. The agency has used gap-filling provisions in WAC 173-401-615(1)(b) to specify monitoring sufficient to demonstrate compliance with this provision. This includes the opacity monitoring, the facility-wide inspections, the requirement to implement an O&M Plan, and the requirements associated with maintenance and repair of emission units.

11.3 Requirements that Apply to Emission Unit No. 3 (Pickling and Cleaning Operations)

The tube pickling and cleaning operation was installed in 1978. The tanks associated with this operation did not go through PSCAA Regulation I, Article 6 permitting but have been registered with the Agency and have been in operation since that time. Pickling tanks are used to remove

the metal oxide/hydroxide scale formed on tubes during annealing. The pickling process uses a solution of hydrofluoric acid and nitric acid. An exhaust ventilation system evacuates fumes uncontrolled through individual stacks located on the roof of the building. The potassium permanganate cleaning tank is a heated solution of potassium permanganate and sodium hydroxide and is used for surface preparation. Emissions from this tank are also exhausted uncontrolled through an individual stack on the roof.

Replacement of these tanks would require a review to determine PSCAA Regulation I, Article 6 permitting applicability. However, at the time of permit issuance, no emission unit specific requirements apply. Facility-wide applicable requirements apply.

11.4 Requirements that Apply to Emission Unit No. 4 (Annealing Furnace)

The annealing furnace has been in operation prior to 1968 (establishment of the Agency). The furnace is rated 5 MMBtu/hr and fired on natural gas. Since there is no permit issued under PSCAA Regulation I, Article 6 that applies to this furnace, there are no emission unit specific requirements that apply. Facility-wide applicable requirements apply.

11.5 Requirements that Apply to Emission Unit No. 5 (Boiler Operations)

The facility has one 1 MMBtu/hr natural gas fired boiler. This unit is exempt from PSCAA Regulation I, Article 6 permitting but subject to 40 CFR Part 63, Subpart DDDDD which establishes emission limitations and work practice standards for HAP emitted from industrial, commercial, and institutional boilers and process heaters located at major sources of HAP. The regulation applies to Western Pneumatic since it operates one industrial boiler and is a major source of HAP. The boiler meets the definition of units designed to burn gas 1. The one-time energy assessment required by the NESHAP does not apply since the boiler was installed in 2016 and considered new as defined in the NESHAP.

PSCAA Regulation III, Section 2.02 requires compliance with the provisions of 40 CFR Part 63 (NESHAPs) excluding specific provisions listed in the regulation. PSCAA Regulation I, Section 3.25 specifies the federal regulation reference date. The Agency has requested and received delegation of the boiler NESHAP from EPA.

The air operating permit application lists the boiler as an insignificant emission unit based on WAC 173-401-533(2)(e). However, WAC 173-401-530(2)(a) states that no emission unit subject to a federally enforceable applicable requirement (other than generally applicable requirements of the state implementation plan) shall qualify as an insignificant emissions unit or activity. In this case, the NESHAP contains federally enforceable applicable requirements.

11.6 Requirements that Apply to Emission Unit No. 6 (Sub-slab Depressurization System)

Western Pneumatic operates a sub-slab depressurization system as an interim remedial action to mitigate indoor vapor intrusion of chlorinated compounds in soil and groundwater. This project includes five shallow vapor wells equipped with at least two granulated activated carbon adsorption vessels (200 lb of carbon each) in series used to treat the contaminated vapors before being released into the atmosphere.

The applicant listed this emission unit as an insignificant emission unit under WAC 173-401-530(4)(p) which specifies thresholds for hazardous air pollutants. However, WAC 173-401-530(2)(a) states that no emission unit subject to a federally enforceable applicable requirement (other than generally applicable requirements of the state implementation plan) shall qualify as

an insignificant emissions unit or activity. In this case, OA 12201 contains federally enforceable applicable requirements.

The monitoring, recordkeeping and reporting is specified in OA 12201. The gap-filling provisions in WAC 173-401-615(1)(b) were used to clarify the recordkeeping requirements for the required monthly inspections.

PSCAA Regulation I, Section 9.20(a) is an applicable requirement since the sub-slab depressurization system and control equipment are permitted under OA 12201 and the requirement specifies that equipment permitted under PSCAA Regulation I, Article 6 must be maintained in good working order. The monitoring in OA 12201 is sufficient to assure the system is maintained in good working order.

11.7 Requirements that Apply to Emission Unit No. 7 (Storage Tank)

A trichloroethylene storage tank was installed at the facility prior to 1968 (establishment of the Agency). The tank was removed from service in 1997 and replaced with a double walled storage tank rated at 3,000 gallons. In 2007, this tank was cleaned when Western Pneumatic discontinued use of trichloroethylene in their degreaser. The tank currently stores n-propyl bromide solvent used in the vapor degreaser. This tank does not meet the definition of insignificant emission unit because of the vapor pressure of the solvent, but it is exempt from permitting under PSCAA Regulation I, Article 6.

There are no emission unit specific requirements that apply to storage tank. Facility-wide applicable requirements apply. There are also other storage tanks located at the facility that meet the definition of insignificant emission units.

12 Standard Terms and Conditions

Some of the requirements that are more general in nature are included in Section 3, Standard Terms and Conditions. This section also contains the standard terms and conditions specifically listed in WAC 173-401-620.

13 General Permitting Requirements

Section 4 of the permit includes the requirements for renewing, revoking, reopening, amending, and modifying the operating permit. It also includes the new source review requirements, both minor NSR and Prevention of Significant Deterioration requirements.

14 General Compliance Requirements

General compliance requirements are included in Section 5 of the permit. These include certification and reporting requirements, requirements associated with inspections and investigations, and compliance testing requirements. Actions required for excess emissions are also included in this section. Finally, this section provides a table summarizing the effective date of the regulations in the permit at the time of permit issuance. Regulations that are approved into the Washington State Implementation Plan (SIP) are federally enforceable. In some cases, there are two versions of the regulation because the newer version has not been adopted into the SIP. In this case, the older version of the regulation would be federally enforceable, and the current rule would only be enforceable by the Agency (or State). The SIP is updated on a somewhat regular basis and what is contained in the SIP can change over time.

15 Generally Applicable Requirements

Some of the requirements that are generally applicable are included in Section 6 of the permit. This includes record retention, asbestos requirements, open burning requirements, stratospheric ozone and climate protection requirements, chemical accident prevention provisions in 40 CFR Part 68, concealment and masking, tampering, RACT requirements, annual emission reporting requirements, greenhouse gas reporting requirements and non-road engine notification requirements.

16 Test Methods and Averaging Periods

Section 7 of the permit includes a summary of the test methods and averaging periods to be used for compliance determination unless otherwise specified in the rules or approval conditions of the permit.

17 Inapplicable Requirements

The requirements identified in Section 8 of the air operating permit do not apply to the facility, or to the specific emissions units identified in the permit. The permit shield applies to all requirements so identified.

18 Insignificant Emission Units and Activities

Section 9 of the permit addresses insignificant emission units and activities. In accordance with WAC 173-401-530(1), determination of an emission unit or activity as insignificant does not exempt the unit or activity from any applicable requirement.

An emission unit or activity is insignificant based on one or more of the criteria identified in WAC 173-401-530. This includes categorical exemption, exemption based on emissions being below emission thresholds in WAC 173-401-530(4), or exemption based on size or production rate. Activities that generate only fugitive emissions which are subject to no applicable requirement other than generally applicable requirements can also be classified as insignificant. Categorically exempt units or activities do not need to be listed in the permit application, but all others do. Western Pneumatic has identified these to be the units listed in Table 10 of the permit.

19 Public Comments and Responses During Initial Drafting

In accordance with WAC 173-401-800, the Agency provided public notice for this draft permit. The comment period started on August 8, 2024 and continued through September 9, 2024. The draft permit, notice and supporting documentation were posted on the Agency website. In addition, public notice was published in the Daily Journal of Commerce and the Seattle Times on August 8, 2024. Notice was also published in Ecology's Permit Register. Two comments were received:

On August 12, 2024, Alan Haake with Western Pneumatic Tube submitted a comment that the pre-control and post-control PTE were reversed for two units in the CAM applicability summary table. These were corrected.

On August 18, 2024, a second comment was received:

From: Brenan <brenankly@gmail.com>
Sent: Sunday, August 18, 2024 7:01 AM
To: Public Comment <PublicComment@pscleanair.gov>
Subject: Comments on Permit No. 20100

This surrounding area is mostly residential, and is next to quire a few public spaces (googles public facilities, restaurants, Fisk public park, Everest Park). The fact that these emissions that increase health risks are allowed in this area is surprising & disappointing.

The Agency responded to this comment in an e-mail sent from Maggie Corbin on September 19, 2024:

Thank you for providing comments on the draft air operating permit pertaining to operations at Western Pneumatic Tube Company. This permit is being issued under the state operating permit provisions in WAC 173-401. This is a master document that lists applicable air pollution requirements that already apply to the facility. This is a legally enforceable document designed to improve compliance with existing requirements. The requirement to obtain an operating permit is required by WAC 173-401, but this regulation does not include a mechanism for reducing emissions from the facility.

Issuance of the operating permit does not provide Western Pneumatic Tube Company the ability to add new sources of air emissions without additional permitting. Adding or modifying stationary equipment that increases emissions would be subject to our new source review permitting which requires a review of air pollution control techniques and an analysis of the specific pollutants and potential impacts on the community. This can be very small emission increases but those would require separate permitting. At this time, there are no proposed new or modified sources that would increase air emissions.

20 EPA Comment Period

The proposed Air Operating Permit was sent to EPA on September 20, 2024 in accordance with WAC 173-401-810. No response received.