

**Draft Statement of Basis for
Boeing Commercial Airplane Group Auburn
Operating Permit 13117, Renewal #1
Issuance Date **TBD****

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List of Abbreviations

ANESHAP	National Emissions Standard for Aerospace Manufacturing and Rework Facilities
AOP	Air Operating Permit
CFR	Code of Federal Regulations
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
EU	Emission Unit
HAP	Hazardous Air Pollutants
NESHAP	National Emissions Standard for Hazardous Air Pollutants
NO_x	Oxides of Nitrogen
NOCOA	Notice of Construction Order of Approval
NSPS	New Source Performance Standard
O&M Plan	Operation and Maintenance Plan
OA	Order of Approval
PSCAA	Puget Sound Clean Air Agency
PSD	Prevention of Significant Deterioration
RCW	Revised Code of Washington
RICE	Reciprocating Internal Combustion Engine
SIP	State Implementation Plan
VOC	Volatile Organic Compounds
WAC	Washington Administrative Code

1 Purpose of the Statement of Basis

This document summarizes the legal and factual basis for the draft permit conditions in the Air Operating Permit (AOP) to be issued to the Boeing Commercial Airplane Group Auburn (Boeing Auburn) facility under the authority of the Washington Clean Air Act, Chapter 70.94 Revised Code of Washington (RCW), Chapter 173-401 of the Washington Administrative Code (WAC), and the 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 Boeing Auburn's air emissions and provides a description of the activities taking place at Boeing Auburn, including a compliance history.

2 Source Description

2.1 Why Boeing Auburn is an AOP Source

An operating permit is required for any source with actual or potential emissions at or above the major source threshold for any "air pollutant". Boeing Auburn qualifies as a major source and is required to obtain an operating permit because it has the potential to emit more than 100 tons per year (tpy) each of carbon monoxide (CO), oxides of nitrogen (NO_x), and volatile organic compounds (VOCs). The site also has a potential to emit more than 25 tpy of total hazardous air pollutants (HAPs) and more than 10 tpy of certain individual HAPs. In recent years, actual emissions of VOC and individual HAPs have exceeded the 100 and 10 tpy thresholds, respectively.

Boeing Auburn submitted an updated analysis of potential emissions as part of the operating permit renewal process. The updated analysis for calculating potential emissions was submitted on May 5, 2024 and is included in the electronic application files. VOC and HAP emissions are primarily from solvent cleaning, and primer and topcoat operations. CO, NO_x, and SO₂ emissions are primarily generated by combustion sources (boilers, furnaces, and building HVAC systems that use natural gas, and by emergency generators that combust diesel fuel).

A summary of calculated potential emissions is provided below:

PTE Emissions (tons)					
CO	NO _x	PM ₁₀	SO ₂	VOC	HAP
320	692	44	3	349	53

Potential emissions of particulate matter (PM₁₀) do not exceed the 100 tpy threshold. The primary sources of particulate matter include machining, sanding, deburring, drilling, routing, shot peening, and other forms of manufacturing support activities. Other sources that contribute to PM₁₀ emissions include combustion sources, spray coating operations, and chemical process tanklines. Boeing estimated potential emissions of PM₁₀ to be approximately 44 tpy.

Potential emissions of sulfur dioxide (SO₂) are also below major source thresholds. SO₂ emissions are generated mainly by combustion sources from boilers, autoclaves, furnaces, and building HVAC systems that use natural gas, and by emergency generators that combust diesel fuel. Boeing estimated that potential emissions of SO₂ are 3 tons per year.

While potential emissions of CO, NO_x, and VOCs have the potential to exceed 250 tons per year, these pollutants are limited to 250 tons during any consecutive 12-month period based on Order 10427. The facility requested this voluntary facility-wide limit on potential emissions to avoid applicability of Prevention of Significant Deterioration (PSD) air regulations to potential future projects.

2.2 Emission Inventory

The following table summarizes the HAP, TAC, and VOC emissions from Boeing Auburn over the last five years. The information is presented in tons per year. Other criteria pollutants were not reported to the Agency since emissions do not exceed our reporting thresholds.

Table 1. Emission inventory summary 2018-2022, tpy

Pollutant	2018	2019	2020	2021	2022
CO	28.6	28.7	26.2	27.5	26.9
NOx	77.3	64.3	69.0	85.6	74.9
HAP	18.1	19.6	9.2	10.3	13.0
VOC	121.1	118.0	64.6	63.2	73.8

2.3 Process Description

Boeing Commercial Airplane's Auburn facility is part of Boeing's Fabrication Division and is located at 700 15th Street Southwest, Auburn, Washington.

The Fabrication Division fabricates parts, tools, and assemblies that are used in the production of every 7-series Boeing jetliner. The majority of the parts are for Boeing 737 aircraft. Millions of parts are produced at Auburn each year, from large wing-skin panels and spars to relatively small brackets. Most of the parts are fabricated out of aluminum alloys, titanium, or steel.

Support operations at the facility include construction, maintenance and repair of equipment, tooling, furniture, buildings, utilities, yards, and other facility-related items.

The facility includes numerous manufacturing and office buildings, warehouses, support buildings such as a boiler house and a wastewater pretreatment plant, roads, and employee parking areas.

3 Review of Permit Application

3.1 Initial AOP

Initial AOP: The original AOP was issued on February 2, 2004, with an expiration date of February 2, 2009.

Administrative Amendments: Administrative modifications were issued to change names of responsible officials. Requests for these changes were received by the Agency on May 12, 2004, June 29, 2006, August 24, 2006, March 9, 2010, November 16, 2011, August 13, 2015, February 27, 2020, September 27, 2022, and October 6, 2023.

3.2 Renewal

A renewal application letter was received on January 30, 2008, and a completeness letter was issued on February 1, 2008. Boeing Auburn has been operating under the application shield provision of WAC 173-400-705(2). Supplemental information has been submitted by the applicant upon request by the Agency. Changes made to specific sections are described within the appropriate requirement descriptions below throughout this Statement of Basis.

3.3 Notice of Construction Orders of Approval

A Notice of Construction Order of Approval (NOCOA) is required of any new or modified air pollution source unless exempted in Regulation I, Section 6.03(b) and (c). Table 3 summarizes the NOCOAs issued since the original Boeing Auburn operating permit was issued on February 2, 2004. The NOCOA and notifications approved and still active have been added to the AOP. Orders of Approval that have been cancelled and superseded or are obsolete have been removed from the permit. All active NOCOAs that are incorporated in the permit are included as an attachment to this Statement of Basis.

Table 3. NOCOA issued to Boeing Auburn since February 2, 2004

NOCOA	Date Issued	Project Description
9134	12/29/2004	One nitrogen dioxide fume scrubber (Scrubber MSS# 17376) rated at 43,000 cfm, in addition to the existing acid scrubber system serving the titanium etching tankline in Building 17-68. A second identical nitrogen dioxide fume scrubber (Scrubber MSS# 17377) can be used as an alternate nitrogen dioxide scrubber instead of MSS#17376.
9133	12/29/2004	One nitrogen dioxide fume scrubber (scrubber MSS# 17145) rated at 50,000 cfm, in addition to the existing acid scrubber system serving the titanium etching tankline in Building 17-62. A second identical nitrogen dioxide fume scrubber (scrubber MSS# 17146) that can be used as an alternate nitrogen dioxide scrubber instead of MSS# 17145.
10014	4/28/2009	Plasma arc cutting operations on a downdraft table used to cut scrap metal parts outside of 17-13 Reclamation Bldg. controlled by a 3000 cfm dust collector with microfiber filters followed by HEPA filters.
10234	1/11/2011	One 2,600 cubic foot dry lubricant spray booth, with 20,000 cfm air flow, located in Bldg 17-68.
10298	5/18/2011	One spray gun cleaning operation at spray booth MSS 14921 in Building 17-45.
10332	7/14/2011	"One spray booth (MSS 55225), 16,000 cfm air flow and 1,408 cf internal volume, located in 17-45 Bldg, equipped with dry exhaust filters meeting 40 CFR 63.745(g)(2)(ii)(A) requirements;
10497	7/9/2012	For the installation and operation of two new natural gas-fired ovens in the 17-45 building to support hybrid laminar flow control (HLFC) operations. Each oven has a rated heat input capacity of 3 mmBtu/hr.
10540	10/25/2012	For the modification of an existing 80-gallon chemical process research tank (tank A-20) to research and development hard chrome plating process tank. The tank ventilation stream will be routed through a packed bed scrubber (MSS # 64252).

NOCOA	Date Issued	Project Description
10427	12/12/2012	Synthetic Minor Emission Cap for facility-wide VOC, NOx, and CO emissions.
10653	10/11/2013	One hard metals etching tank and the associated rinse tank. One system consisting of two packed bed wet scrubbers, each with maximum exhaust flow rate of 55,000 acfm.
10730	5/19/2014	A natural gas fired 13 mmBtu/hr autoclave for composite airplane parts curing.
10846	10/23/2014	Modification to Spray Booth (MSS# 56105), rated at 16,000 cfm and located in Building 17-45. The booth is to be equipped as a condition of this Order with three-stage, Purolator Supersorb III dry filtration system, or equivalent. The booth was previously permitted under Order of Approval No. 8669. This Order authorizes the use of chromium-containing coatings and application with a robotic spray system.
11227	9/20/2016	Modification of Tank AA3 in Bldg. 17-45 to be used as a deoxidizing tank for metal finishing. Air emissions from the tank are controlled by an existing scrubber (Order of Approval No. 8029, dated 11/19/07) or an equivalent scrubber approved by the Agency.
11232	10/3/2016	One Viron VVS Packed Bed Fume Scrubber rated at 35,000 cfm to control acid emissions from Tank TNP-4 in Building 17-06. This scrubber was originally permitted under Order of Approval No. 6109 (July 14, 1995), but is being modified to reflect the practical maximum flow rate of the scrubber.
11388	9/20/2017	"This Order of Approval allows and establishes approval conditions for, the conversion of solution in Tank M-11 in building 17-68 with up to 67% nitric acid solution and water, the conversion of tank M-19 in building 17-68 to Dipsol IZ-264, and merges allowances and approval conditions from Order of Approval Number 3587 for the following equipment at the Advanced Metals Structures building located in Bldg 17-68: five scrubbers - Harrington SA-1 rated at 19,800 cfm (Col 1-11); Harrington SA-2 rated at 23,760 cfm (A-10.5); Harrington SH-1 rated at 28,580 cfm (A-3); Harrington SH-2 rated at 37,500 cfm (A-2.5); Harrington SH-3 rated at 5,680 cfm (A-2); and three Spray Coating Booths (Col A-6): SBS DB1010 rated at 12,000 cfm; SBS DB2010 rated at 23,500 cfm, and JBI 20 x 10 rated at 23,500 cfm.
11453	10/12/2017	A TLM-610 model laser cutting system, employing a 3.3 kW PRC CO2 laser used to cut a variety of metals and metal alloys, located inside building 17-68. The system is completely enclosed and vented to 5,000 cfm Farr GS10 HEPA filter dust collector.

NOCOA	Date Issued	Project Description
11567	10/4/2018	Installation of a fully enclosed laser ablation system used to remove paints from aerospace parts. Emissions of particulate matter, Chrome (VI) and other associated dust fumes from the laser ablation system are controlled with a dust collection system - equipped with a MERV 14 rated filter followed in series by a HEPA filter.
11663	1/8/2019	One TLM-610 model laser cutting system used to cut a variety of metals including aluminum, titanium, stainless steel, and other metal alloys located in building 17-68. Emissions will be vented to a Farr GS10 dust collector rated at 5,000 cubic feet per minute and equipped with a HEPA filter.
11312	5/28/2021	This Order of Approval allows the conversion of solution in Tank H7 in Bldg 17-07 to be used as a deoxidizing tank for metal finishing and continues approval for the existing Viron VVS-96120 Vertical Wet Scrubber rated 41,000 cfm for controlling acid mist vapors from Bldg 17-07 previously permitted under OA 7263.
12007	5/28/2021	"One Viron Model VVS-6060-FRP-12.0-60-S-2-F-460-3-60 packed bed wet scrubber with flow rate of 12,000 acfm (asset # 58036) to replace scrubber asset # 58035 (formerly CS-1) and one rinse tank.
12327	6/12/2023	One Mitsubishi 3015GX-F model laser cutting system used to cut a variety of metals including aluminum, titanium, stainless steel, and other metal alloys located in building 17-07 (Emergent Operations Building). Emissions will be vented to a Camfil GSPX6 Farr Gold Series dust collector rated at 3,000 cubic feet per minute and equipped with a HEPA filtration system.

In addition, Boeing provided notification in accordance with Regulation I, Section 6.03(b)(7) for installation one Torit/Donaldson baghouse rated at 4,500 cfm (552N, 4/17,2008), one Torit/Donaldson DFO 2-4 baghouse controlling emissions from a sander doing deburring and edge break operations rated at 2,500 cfm (577N, 8/22,2008), and one Torit/Donaldson baghouse with 4 cartridge filters controlling emissions from a sander for aluminum sheet steel (1054N, 3/3/2015).

Other approved during this time period but no longer active are listed below:

Table 4. NOCOA approved at Boeing Auburn since February 2, 2004, but no longer active.

NOCOA	Date Issued	Description and Notes
9111	1/21/2005	One 400 cfm spray booth located at the 17-68 building with Aerospace NESHAP dry filters complying with 40 CFR 63.745(g)(2)(ii) of the Aerospace NESHAP and additional HEPA filters. Asset no longer in use.

NOCOA	Date Issued	Description and Notes
9864	8/29/2008	This Order was cancelled and superseded by Order 10540 issued 10/25/12.
10974	7/13/2015	This Order was cancelled and superseded by Order 11663 issued 1/8/2019
10304	5/19/2011	Two natural gas fired Composite Curing Ovens, 12.6 MMBtu/hr and 7,700 cfm per oven, located in Building 17-45. Ovens were demolished or removed from the site.
10845	12/11/2014	This Order was cancelled and superseded by Order 12007 issued 5/28/2021.
11528	6/5/2018	Modification to Spray Booth (MSS# 56105) 8' x 16', rated at 16,000 cfm and located in Building 17-45. The booth is to be used for spray coating aerospace parts with corrosion inhibiting compound. The booth was previously permitted under Order of Approval No. 10846, which would have cancelled and superseded with this NOCOA 11528. Because the modification did not take place, the NOCOA was cancelled but the booth is still at the site and continues to operate under NOCOA 10846.

Boeing Auburn submitted requests and the Agency concurred that several activities were exempt from required permitting under Regulation I, Section 6.03(b)(10). These activities are listed in Section 9.1 of this document.

For new or modified sources exempt from permitting under Regulation I, Section 6.03(c), Boeing must maintain documentation on-site demonstrating the equipment or process meets the criteria in the categorical exemption.

Proposed NOCOA 12441:

A Notice of Construction application was submitted and reviewed to several Orders of Approval (OA) to update the corresponding permit condition to include language for use of interlock systems in lieu of requirements to read and record the pressure drop for spray booths at the facility. The proposed interlock language for the NOCOA conditions is consistent with the Aerospace NESHAP (40 CFR 63, Subpart GG). For spray booths permitted prior to the 2015 NESHAP amendments, the language in the NOCOA and existing operating permit conflicted with the most current NESHAP in that it did not allow the option to use the interlock system in lieu of recording the pressure drop on a routine basis. The interlock systems are already installed and operating on the spray booths. If approved, this change would take effect on the same date the AOP renewal permit is issued.

3.4 Regulatory Orders Issued to the Facility

Potential emissions of carbon monoxide (CO), oxides of nitrogen (NOx), volatile organic compound (VOC) are each limited below 250 tons during any consecutive 12-month period in Order 10427 issued December

12, 2012. The facility requested this voluntary facility-wide limit on potential emissions to avoid applicability of Prevention of Significant Deterioration (PSD) air regulations to potential future projects.

4 Compliance History

Boeing Auburn has been inspected at least annually by PSCAA since the last operating permit was issued. The compliance history for Boeing Auburn for the previous five years is summarized below. Notices of Violation (NOVs) and Written Warnings (WWs) issued to the facility are listed in chronological order.

Table 5 NOVs and Written Warnings issued since previous permit issuance

WW or NOV # ¹	Violation Date	Issue Date	Closed by Agency?	Applicable Reg. or permit ³	Comments
NOV 4-043907	1/16/20	5/15/20	Yes	Regulation III, 4.03(a)(7)(C) AOP 13117, Section IV.C.2	Late submittal of the 2019 4 th Quarter Asbestos Report
NOV 3-000538	Nov 2020 – Jan 2021	2/1/21	Yes	AOP 13117, Section V.O.1.4	Failure to keep records of all inspections, tests, and other actions required by the AOP

5 Compliance Assurance Monitoring

The Compliance Assurance Monitoring (CAM) rule in 40 CFR Part 64 requires owners and operators to monitor the operation and maintenance of their control equipment so that they can evaluate the performance of their control devices and report whether or not their facilities meet established emission standards. If owners and operators of these facilities find that their control equipment is not working properly, the CAM rule requires them to take action to correct any malfunctions and to report such instances to the appropriate enforcement agency (i.e., state and local environmental agencies). Additionally, the CAM rule provides some enforcement tools that allow state and local environmental agencies to require facilities to respond appropriately to the monitoring results and improve pollution control operations.

A CAM plan is required for each federally enforceable applicable emission limit or standard for each emission unit that meets the following criteria:

1. The unit uses a control device to achieve compliance with the emission limit or standard.
2. The potential pre-control emissions of the applicable pollutant from the unit are at least 100% of the major source amount (100 tpy).
3. The applicable requirement is not otherwise exempt by rule, such as by a New Source Performance Standard (NSPS) or National Emission Standard for Hazardous Air Pollutants (NESHAP) proposed after November 15, 1990, or stratospheric ozone requirements.

Boeing Auburn submitted an updated CAM analysis on 5/1/2024 to support this operating permit renewal.

Table 6 was provided by Boeing Auburn in their updated CAM analysis. The analysis included a review of emission units at the facility that are subject to an emission limitation or standard and use a control device to achieve compliance with any such emission limitation or standard. For emission units that use a control

device at this facility, only pre-control device emissions of particulate matter were evaluated for the CAM analysis to determine if emissions met or exceeded the major source threshold of 100 tons per year. The particulate matter emission standards in Regulation I, Section 9.09 apply facility-wide to equipment used in the manufacturing process in addition to the opacity standards in Regulation I, Section 9.03. Although some control equipment may also control emissions of other types of pollutants, there are no emission limitations or standards for the other pollutants. In no case did the estimate of potential pre-control device emissions exceed the major source threshold.

Some equipment was determined by Boeing Auburn to be inherent process equipment as defined in 40 CFR Part 64.1 since the primary function is material handling. Inherent process equipment means “equipment that is necessary for the proper or safe functioning of the process, or material recovery equipment that the owner or operator documents is installed and operated primarily for purposes other than compliance with air pollution regulations. Equipment that must be operated at an efficiency higher than that achieved during normal process operations in order to comply with the applicable emission limitation or standard is not inherent process equipment. For the purposes of CAM, inherent process equipment is not considered a control device.” The Agency has accepted the determinations provided by Boeing Auburn for the CAM analysis. However, the units are still required to meet other requirements in the permit such as the requirement to address these units in the O&M Plan and comply with WC 173-400-114 if the unit is replaced.

Table 6 Determination of CAM Applicability

				Emission limitation or standard, other than an exempt limitation or standard, for the applicable regulated air pollutant	Control device to achieve compliance with any such emission limitation or standard	Pre-Control Device PTE	Does the unit have the potential pre-control device emissions $\geq$ 100% of the amount (TPY) to be classified as a major source?
<u>Bldg.</u>	<u>Col./Dr.</u>	<u>MSS ID#</u>	<u>Source Description</u>	<u>40 CFR 64.2 (a)(1)</u>	<u>40 CFR 64.2(a)(2)</u>	<u>(TPY)</u>	<u>40 CFR 64.2(a)(3)</u>
Chemical Process Tankline Operations							
17-06	O/S; Door W-38	12174	Tankline	Yes	Scrubber	2.54	No
17-06	O/S; Door W-36/W-37	12453	Tankline	Yes	Scrubber	2.20	No
17-07	South of Bldg.	4223	Tankline	Yes	Scrubber	2.57	No
17-07	South of Bldg.	4224	Tankline	Yes	Scrubber	3.20	No
17-07	South of Bldg.	11624	Tankline	Yes	Scrubber	2.57	No
17-08	South end	64252	Tankline	Yes	Scrubber	1.33	No

				Emission limitation or standard, other than an exempt limitation or standard, for the applicable regulated air pollutant	Control device to achieve compliance with any such emission limitation or standard	Pre-Control Device PTE	Does the unit have the potential pre-control device emissions $\geq$ 100% of the amount (TPY) to be classified as a major source?
<u>Bldg.</u>	<u>Col./Dr.</u>	<u>MSS ID#</u>	<u>Source Description</u>	<u>40 CFR 64.2 (a)(1)</u>	<u>40 CFR 64.2(a)(2)</u>	<u>(TPY)</u>	<u>40 CFR 64.2(a)(3)</u>
17-45	D/E1;Door 16	55146	Tankline	Yes	Scrubber	1.11	No
17-45	D/E1;Door 16	55147	Tankline	Yes	Scrubber	1.40	No
17-45	E1;Door 16	55148	Tankline	Yes	Scrubber	1.72	No
17-45	E1, Door 16	24567	Tankline	Yes	Scrubber	1.63	No
17-45	G2; Door 31	60036	Tankline	Yes	Scrubber	3.59	No
17-45	G2; Door 31	60037	Tankline	Yes	Scrubber	2.76	No
17-62	O/S; East Door 21	58010	Tankline	Yes	Scrubber	1.00	No
17-62	O/S; East Door 21	58015 / 17145	Tankline	Yes	Scrubber	3.14	No
17-62	O/S; East Door 14	58038	Tankline	Yes	Scrubber	0.78	No
17-62	O/S East; Door 20	17146	Tankline	Yes	Scrubber	3.14	No
17-62	O/S East	58036	Tankline	Yes	Scrubber	0.75	No
17-68	O/S; NW	4222	Tankline	Yes	Scrubber	1.38	No
17-68	A11	56584	Tankline	Yes	Scrubber	1.24	No
17-68	A9.5	20515 / 20516	Tankline	Yes	Scrubber	3.45	No
17-68	A2	56585	Tankline	Yes	Scrubber	0.36	No
17-68	A2.5	56586	Tankline	Yes	Scrubber	2.35	No
17-68	A3	56602	Tankline	Yes	Scrubber	1.79	No
17-68	A2	17376	Tankline	Yes	Scrubber	2.70	No
17-68	A2	17377	Tankline	Yes	Scrubber	1.09	No
Coating, Cleaning and Depainting Operations							
17-06	D1	6765	Spray Coating Booth	Yes	Dry Filter	14.23	No
17-06	D1	6766	Spray Coating Booth	Yes	Dry Filter	14.23	No
17-07	B/C11	9063	Spray Coating Booth	Yes	Dry Filter	0.51	No

				Emission limitation or standard, other than an exempt limitation or standard, for the applicable regulated air pollutant	Control device to achieve compliance with any such emission limitation or standard	Pre-Control Device PTE	Does the unit have the potential pre-control device emissions $\geq 100\%$ of the amount (TPY) to be classified as a major source?
<u>Bldg.</u>	<u>Col./Dr.</u>	<u>MSS ID#</u>	<u>Source Description</u>	<u>40 CFR 64.2 (a)(1)</u>	<u>40 CFR 64.2(a)(2)</u>	<u>(TPY)</u>	<u>40 CFR 64.2(a)(3)</u>
17-07	AA10.5	12355	Spray Coating Booth	Yes	Dry Filter	5.69	No
17-07	BB10	12356	Spray Coating Booth	Yes	Dry Filter	3.16	No
17-08	C5.5	61615	Spray Coating Booth	Yes	Dry Filter	1.94	No
17-45	F-7	3806	Spray Coating Booth	Yes	Dry Filter	3.67	No
17-45	C1	10695	Spray Coating Booth (Manual Booth)	Yes	Dry Filter	2.02	No
17-45	C2 Finish Zone	13305	Spray Coating Booth	Yes	Dry Filter	4.81	No
17-45	C2 Finish Zone	13306	Spray Coating Booth	Yes	Dry Filter	4.81	No
17-45	C2 Finish Zone	13307	Spray Coating Booth	Yes	Dry Filter	4.81	No
17-45	C2 Finish Zone	13308	Spray Coating Booth	Yes	Dry Filter	4.81	No
17-45	C2	14921	Spray coating booth (Hand-dip line)	Yes	Dry Filter	1.01	No
17-45	B1, Mezzanine	14720	Spray Coating Booth	Yes	Dry Filter	3.03	No
17-45	B/C2 2ND FLR	55223	Spray Coating Booth	Yes	Dry Filter	2.53	No
17-45	B1.8, 2nd Floor	55225	Spray Coating Booth	Yes	Dry Filter	2.02	No
17-45	B2, 2ND FLR	55226	Spray Coating Booth	Yes	Dry Filter	2.53	No
17-45	G/H2	59822	Spray Coating Booth	Yes	Dry Filter	2.02	No
17-45	F2.5	56105	Spray Coating Booth	Yes	Dry Filter	2.02	No
17-62	B8	6783	Spray Coating Booth	Yes	Dry Filter	2.02	No

				Emission limitation or standard, other than an exempt limitation or standard, for the applicable regulated air pollutant	Control device to achieve compliance with any such emission limitation or standard	Pre-Control Device PTE	Does the unit have the potential pre-control device emissions $\geq$ 100% of the amount (TPY) to be classified as a major source?
<u>Bldg.</u>	<u>Col./Dr.</u>	<u>MSS ID#</u>	<u>Source Description</u>	<u>40 CFR 64.2 (a)(1)</u>	<u>40 CFR 64.2(a)(2)</u>	<u>(TPY)</u>	<u>40 CFR 64.2(a)(3)</u>
17-45	B1.6 2nd FLR	19780	Spray Coating Booth	Yes	Dry Filter	2.91	No
17-62	F2.5	58303	Spray Coating Booth	Yes	Dry Filter	2.53	No
17-62	E15	58305	Spray Coating Booth	Yes	Dry Filter	2.53	No
17-66	J5	6778	Spray Coating Booth	Yes	Dry Filter	0.46	No
17-66	D10	60710	Spray Coating Booth	Yes	Dry Filter	2.02	No
17-68	E-1	10851	Dry Lube Spray Booth	Yes	Dry Filter	1.83	No
17-68	A7	56540	Spray Coating Booth	Yes	Dry Filter	1.52	No
17-68	A6.1	56541	Spray Coating Booth	Yes	Dry Filter	2.97	No
17-68	A7.5	59271	Spray Coating Booth	Yes	Dry Filter	2.97	No
17-68	C-11	25201	Spray coating booth (Dry lube)	Yes	Dry Filter	2.53	No
Cyclones, Baghouses and Other Particulate Control Operations							
17-06	O/S; Door W37	12203	Penetrant Developer	Yes	Mist Eliminator	5.59	No
17-06	O/S A6; Door W38	12183	Shot Peening	Yes	Cartridge Filter	4.96	No
17-06	C23	4074	Shot Peening	Yes	Wet Dust Collector	3.16	No
17-06	O/S; Door W31	61215	Shot Peening	Yes	Cartridge Filter	2.26	No
17-06	O/S; Door E13 Mezz	6120	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door E13 Mezz	6121	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door E13 Mezz	6122	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door E13 Mezz	6123	Aluminum Milling	Yes	No – Material Handling	N/A	N/A

				Emission limitation or standard, other than an exempt limitation or standard, for the applicable regulated air pollutant	Control device to achieve compliance with any such emission limitation or standard	Pre-Control Device PTE	Does the unit have the potential pre-control device emissions $\geq 100\%$ of the amount (TPY) to be classified as a major source?
<u>Bldg.</u>	<u>Col./Dr.</u>	<u>MSS ID#</u>	<u>Source Description</u>	<u>40 CFR 64.2 (a)(1)</u>	<u>40 CFR 64.2(a)(2)</u>	<u>(TPY)</u>	<u>40 CFR 64.2(a)(3)</u>
17-06	O/S; Door E13 Mezz	6125	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door E13 Mezz	6126	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door E13 Mezz	6127	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door E9 Mezz	6132	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door E9 Mezz	6133	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door E9 Mezz	6134	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door E9 Mezz	6135	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door E14, Mezz	9898	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door E14, Mezz	9899	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door W28A	14828	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door W25A	14829	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door W25A	14830	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door W31	58388	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door W31	58389	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door 25/26	12603	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door 25/26	12604	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S; Door W31	58617	Aluminum Milling	Yes	No – Material Handling	N/A	N/A
17-06	O/S A6; Dr W38	12181	Penetrant/Powder Dump	Yes	Cartridge Filter	8.12	No

				Emission limitation or standard, other than an exempt limitation or standard, for the applicable regulated air pollutant	Control device to achieve compliance with any such emission limitation or standard	Pre-Control Device PTE	Does the unit have the potential pre-control device emissions $\geq 100\%$ of the amount (TPY) to be classified as a major source?
<u>Bldg.</u>	<u>Col./Dr.</u>	<u>MSS ID#</u>	<u>Source Description</u>	<u>40 CFR 64.2 (a)(1)</u>	<u>40 CFR 64.2(a)(2)</u>	<u>(TPY)</u>	<u>40 CFR 64.2(a)(3)</u>
17-06	O/S: NE corner	40710	Chordal Shot Peener	Yes	Cartridge Filter	4.45	No
17-06	O/S Dr E7	24952	Chordal Shot Peener	Yes	Cartridge Filter	0.90	No
17-06	O/S A14	20765	Compression Peener	Yes	Cartridge Filter	4.29	No
17-06	O/S A24	20766	Spanwise Peener	Yes	Cartridge Filter	4.29	No
17-06	O/S Door N	24120	Primer Laser Ablation	Yes	Cartridge Filter (HEPA)	0.51	No
17-07	O/S; South B-11	13713	Powder Developer	Yes	Cartridge Filter	1.76	No
17-07	O/S; SW D-15	13675	Shot Peening	Yes	Cartridge Filter	3.38	No
17-07	O/S; EE9 Door W19	63616	Shot Peening	Yes	Cartridge Filter	3.61	No
17-07	O/S; EE9 Door W19	64253	Shot Peening	Yes	Cartridge Filter	2.26	No
17-07	O/S; EE9 Door W19	63461	Shot Peening	Yes	Cartridge Filter	0.90	No
17-07	O/S Door W19	63614	Shot Peening	Yes	Cartridge Filter	2.16	No
17-06	O/S Door W30	58618	Aluminum Milling	Yes	No – Material Handling	N/A	No
17-07	O/S; EE9/O Dr W19	11049906	Shot Peening	Yes	Cartridge Filter	7.06	No
17-07	O/S; N	25350	Metal Cutting	Yes	Baghouse	4.41	No
17-06	Outside Mezz Shredder	17000	Aluminum Milling	Yes	No – Material Handling	N/A	No
17-07	O/S; EE10	122344	Shot Peening	Yes	Cartridge Filter	2.71	No
17-07	O/S; EE11	122345	Shot Peening	Yes	Cartridge Filter	2.71	No
17-07	O/S Door N1	11202636	Laser Cutting	Yes	Cartridge Filter (HEPA)	0.02	No
17-10	North side	64989	Paper-based Composite Material Milling	Yes	Baghouse	6.18	No

				Emission limitation or standard, other than an exempt limitation or standard, for the applicable regulated air pollutant	Control device to achieve compliance with any such emission limitation or standard	Pre-Control Device PTE	Does the unit have the potential pre-control device emissions $\geq 100\%$ of the amount (TPY) to be classified as a major source?
<u>Bldg.</u>	<u>Col./Dr.</u>	<u>MSS ID#</u>	<u>Source Description</u>	<u>40 CFR 64.2 (a)(1)</u>	<u>40 CFR 64.2(a)(2)</u>	<u>(TPY)</u>	<u>40 CFR 64.2(a)(3)</u>
17-13	O/S NE Corner	25010	Plasma Cutting	Yes	Cartridge Filter	2.65	No
17-45	G2; 2nd Floor Door 22	55679	Powder Developer	Yes	Cartridge Filter	13.24	No
17-06	Outside Mezz Shredder	24946	Aluminum Milling	Yes	No – Material Handling	N/A	No
17-06	Mezz; S of Shredder / Briquetter	20684	Aluminum Milling	Yes	No – Material Handling	N/A	No
17-06	Mezz; S of Shredder / Briquetter	20708	Aluminum Milling	Yes	No – Material Handling	N/A	No
17-45	A2: Mezz	55214 & 55215	Salt Bath Paint Stripping + Rinse	Yes	Wet Particulate Scrubber	27.38	No
17-45	O/S N side Between Dr. 23 & 24	19925	Polishing	Yes	Baghouse	5.29	No
17-45	O/S W side between Dr. 59 & 60	19962	Aluminum Deburr	Yes	Baghouse	5.29	No
17-06	Mezz; S of Shredder / Briquetter	20897	Aluminum Milling	Yes	No – Material Handling	N/A	No
17-45	Outside A7	25414	Aluminum Milling	Yes	Cartridge Filter	5.29	No
17-45	Outside A7	21567	Aluminum Milling	Yes	Cartridge Filter	3.53	No
17-45	G-3	18338	Fladder Sanding	Yes	Baghouse	2.21	No
17-45	F-5	35682	Fladder Sanding Deburr	Yes	Baghouse	3.97	No
17-45	D-7	1109751 6	Fladder Deburr	Yes	Cartridge Filter	2.21	No
17-62	B1 Mezz	58323	Salt Bath Dip Brazing	Yes	Wet Particulate Scrubber	27.38	No
17-66	O/S; Door 9	61877	Quality Assurance Laboratory	Yes	Cartridge Filter	1.06	No

				Emission limitation or standard, other than an exempt limitation or standard, for the applicable regulated air pollutant	Control device to achieve compliance with any such emission limitation or standard	Pre-Control Device PTE	Does the unit have the potential pre-control device emissions $\geq$ 100% of the amount (TPY) to be classified as a major source?
<u>Bldg.</u>	<u>Col./Dr.</u>	<u>MSS ID#</u>	<u>Source Description</u>	<u>40 CFR 64.2 (a)(1)</u>	<u>40 CFR 64.2(a)(2)</u>	<u>(TPY)</u>	<u>40 CFR 64.2(a)(3)</u>
17-68	O/S; F1/4.5; Door E7	8763	Grinding and Other Machining	Yes	Baghouse	27.36	No
17-68	Col C4	11-117740	Laser Cutting	Yes	Cartridge Filter (HEPA)	4.41	No
17-68	Col C5	11-097286	Laser Cutting	Yes	Cartridge Filter (HEPA)	4.41	No
17-10	BB-6	9545BH	Abrasive Blast	Yes	Baghouse	2.82	No
17-68	B13	16511	Plastic Media Blasting	Yes	Cartridge Filter	0.59	No

6 Explanation of Applicable Requirements

Applicable requirements are listed in several sections of this operating permit as outlined below. The permit only lists the requirements that PSCAA has determined to be within the scope of the definition of “applicable requirements” under the operating permit program. Boeing Auburn is legally responsible for complying with all applicable requirements of the operating permit as well as other requirements that do not fit the definition of “applicable requirements” found in Chapter 173-401 Washington Administrative Code (WAC).

The terms and conditions in Section I (emission limits and performance standards), Section III (prohibited activities) and Section IV (activities requiring additional approval) of the permit are federally enforceable except for those terms and conditions designated as not federally enforceable (e.g., “State Only”). The terms and conditions in Section II (monitoring, maintenance and recordkeeping methods), Section V (standard terms and conditions), Section VI (permit actions) and Section VII (permit shield) of this permit are federally enforceable (even though the cited authority for those terms and conditions might be designated as a “State Only” provision -- such as a requirement of WAC Chapter 173-401)), but only to the extent that they implement federally enforceable terms and conditions in Section I (emission limits and performance standards), Section III (prohibited activities) or Section IV (activities requiring additional approval).

6.1 Section I.A.1 (PSCAA and Ecology Facility-Wide Applicable Requirements)

Section I.A.1 contains PSCAA and Washington Department of Ecology (Ecology) requirements that apply facility wide. The table in Section I.A.1 contains the citation and adoption or effective date for each requirement, along with a paraphrased description of the requirement, monitoring, maintenance and

recordkeeping requirements, and any applicable reference test method. In the event of conflict or omission between the information contained in the third column and the actual statute or regulation cited in the second column, the requirements and language of the actual statute or regulation cited shall govern.

The actual enforceable requirement and adoption or effective date(s) are in the second column. The fourth column, "Monitoring, Maintenance & Recordkeeping Method," identifies the methods described in Section II of the permit. Following these methods is an enforceable requirement of this permit. The fifth column, "Reference Test Method," identifies the reference method associated with an applicable emission limit that is to be used if and when a source test is required. Unless otherwise specified in the rules or permit condition, the averaging period for the test method is specified in Section VIII.A.

In some cases, monitoring, maintenance and recordkeeping methods have been established under WAC 173-401-615(1)(b) which specifies, "Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, as reported pursuant to subsection (3) of this section. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement. Recordkeeping provisions may be sufficient to meet the requirements of this paragraph." The Agency refers to this as "gap-filling". Gap-filling or other monitoring, reporting or recordkeeping added to assure compliance with the terms and conditions of the permit in accordance with WAC 173-401-630(1) are identified in this document. In determining appropriate gap-filling or sufficiency monitoring, the Agency has evaluated the current state of compliance, the variability of process and emissions, the environmental impacts of problems and other technical considerations.

Some requirements in WAC 173-400-040 have been deleted from PSCAA SIP because it has been determined there is a corresponding rule being implemented by PSCAA that applies only to sources in our jurisdiction. In these cases, only the local rule will apply and EPA has removed the requirement from the SIP. This is consistent with the language in the 12/29/12 version of WAC 173-400-020(1) that states "The provisions of this chapter shall apply statewide, except for specific subsections where a local authority has adopted and implemented corresponding local rules that apply only to sources subject to local jurisdiction as provided under RCW 70.94.141 and 70.94.331".

The requirements included in this table and the associated monitoring, maintenance and recordkeeping methods have not been significantly revised from the existing operating permit. For several of the gap-filling provisions, the previous permit did specify that if a potential compliance problem was found during the inspection, Boeing had the option to correct the problem within 24 hours, shut down the equipment or emission unit, or report problems not corrected within 24 hours. The Agency has updated the monitoring to clarify this only applies if there is not specific monitoring under the applicable requirement such as a federal rule which may specify when an occurrence is considered noncompliance with the regulation. In these cases, the occurrence would need to be reported in the required deviation report. The Agency has also determined the requirement to report problems not corrected within 24 hours is not necessary. When gap-filling is the sole monitoring provision for a requirement, Boeing Auburn is not required to report a deviation if they take the actions required by the permit. Typically this is correct the problem in 24 hours or shut down the equipment or emission unit until the problem is addressed. The Agency also added specific recordkeeping requirements to document the required monitoring.

- Opacity Requirements:** Opacity requirements are included in I.A.1.1. The monitoring, maintenance and recordkeeping requirements have not been changed from the existing operating permit (gap-filling provisions). There are specific monitoring provisions for emergency generators used for backup electricity and fire suppression. Emergency generators and generators for fire suppression pumps often have visible emissions, but seldom have visible emissions greater than 20% opacity. If Boeing Auburn observes visible emissions from an emergency generator or generator for fire suppression pumps, Boeing Auburn shall check to make sure that the generator is operated and maintained properly and either shut it down within 3 hours or observe visible emissions using Ecology Method 9A within 30 days. Three hours was chosen because these units are usually tested once a month for less than three hours. If they have visible emissions and operate for more than three hours, the permit requires Boeing Auburn to either determine the opacity during that test or some other test within 30 days. It is not the agency's intention that Boeing Auburn would have to startup a generator, solely for the purpose of determining opacity.
- Particulate Matter:** Particulate matter requirements are included in I.A.1.2 and I.A.1.4. The monitoring, maintenance and recordkeeping requirements have not been changed from the existing operating permit (gap-filling provisions). Opacity monitoring is used as a surrogate to performing a PSCAA Method 5 test, with Boeing Auburn taking corrective action if any visible emissions are noted. Taking corrective action does not relieve Boeing Auburn from the obligation to comply with the particulate matter standard itself. If PSCAA Method 5 testing conducted by Boeing or the Agency showed an exceedance of the standard, that would be a deviation of the standard regardless of opacity monitoring results.
- SO₂ Requirements:** SO₂ requirements are contained in Requirement I.A.1.6. Boeing Auburn combusts only pipeline grade natural gas in all combustion units except for the emergency generators. EPA AP-42, Chapter 1, Section 4 notes that emissions of SO₂ from natural gas boilers are low because pipeline natural gas typically has sulfur levels less than 2000 grains of sulfur per million cubic feet which is equivalent to approximately 3.4 parts of sulfur per million cubic feet of natural gas as shown in the calculations below:

$$\frac{2,000 \text{ gr } S}{1,000,000 \text{ ft}^3 \text{ nat. gas}} \times \frac{1 \text{ lb}}{7000 \text{ gr}} \times \frac{385 \frac{\text{ft}^3}{\text{mole } S}}{32 \frac{\text{lb}}{\text{mole } S}} = 3.44 \times 10^{-6} \frac{\text{ft}^3 S}{\text{ft}^3 \text{ nat. gas}} \equiv 3.44 \text{ ppm dv } S$$

According to Perry's Chemical Engineer's Handbook, each cubic foot of natural gas requires approximately 10 cubic feet of air for combustion, yielding approximately 11 cubic feet of combustion exhaust gases, consisting mostly of nitrogen, water vapor, and carbon dioxide. The sulfur in the natural gas will almost all be converted to sulfur dioxide, with each cubic foot of sulfur producing the same volume of sulfur dioxide. Since each cubic foot of natural gas contains 3.44×10^{-6} cubic foot of sulfur, each cubic foot of stack exhaust will contain approximately:

$$3.44 \times 10^{-6} \frac{\text{ft}^3 S}{\text{ft}^3 \text{ nat. gas}} \times \frac{1 \text{ ft}^3 \text{ SO}_2}{1 \text{ ft}^3 S} \times \frac{1 \text{ ft}^3 \text{ nat. gas}}{11 \text{ ft}^3 \text{ stack exhaust}} = 3.13 \times 10^{-7} \frac{\text{ft}^3 \text{ SO}_2}{\text{ft}^3 \text{ stack exhaust}}$$

This is equivalent to 0.31 ppm dv SO₂. Note that this estimated value is less than one-tenth of one percent of the 1,000 ppm SO₂ standard. Therefore, it is reasonable to assume that combustion

units that are fired on natural gas cannot exceed the 1,000 ppm SO₂ limits in Puget Sound Clean Air Agency Regulation I, Section 9.07.

For emergency generators, Boeing Auburn must maintain records demonstrating only low sulfur diesel is used.

- Nuisance Requirements: General nuisance requirements are contained in Requirements I.A.1.7 and I.A.1.12. The monitoring, maintenance and recordkeeping requirements have not been changed from the existing operating permit (gap-filling provisions).
- Fugitive Dust Requirements: Fugitive dust requirements are contained in Requirements I.A.1.8 and I.A.1.9. The monitoring, maintenance and recordkeeping requirements have not been changed from the existing operating permit (gap-filling provisions).
- Good Working Order: Requirements to maintain equipment that does not have an NOCOA in good working order are contained in Requirement I.A.1.10. For equipment that does have an NOCOA, the requirement to maintain the equipment in good work order is included in the specific emission unit requirements. The monitoring, maintenance and recordkeeping requirements have not been changed from the existing operating permit (gap-filling provisions). Section II of the permit specifies the minimum monitoring, maintenance and recordkeeping requirements for maintaining the equipment in good working order. In addition, the facility-wide inspections provide monitoring of the general effectiveness of Boeing's O&M Plan. Although this provides sufficient monitoring criteria for Boeing Auburn to certify that equipment has been maintained in good working order, the Agency staff may evaluate the maintenance of each piece of equipment to determine if it has been maintained in good working order.
- O&M Plan Requirements: For the O&M Plan requirement in I.A.1.11, Boeing Auburn is required 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 requirement, PSCAA added that, in most instances, following the manufacturer's operations manual or equipment operational schedule, minimizing emissions until the repairs can be completed and taking measures to prevent recurrence of the problem may be considered good industrial practice. This language is consistent with Ecology requirement in WAC 173-400-101(4). The PSCAA also added language establishing criteria for determining if good industrial practice is being used. These include monitoring results, opacity observations, review of operations and maintenance procedures, and inspections of the emission unit or equipment. The PSCAA added this wording in response to Washington State court decision, Longview Fibre Co. v. DOE, 89 Wn. App. 627 (1998), which held that similar wording was not vague and gave sufficient notice of the prohibited conduct.
- RCW 70.94.040 has been deleted from facility-wide applicable requirements. The provisions of RCW 70.94 RCW, or the ordinances, resolutions, rules or regulations adopted thereunder are included in the permit as applicable requirements.

6.2 Section I.A.2 (US EPA NSPS General Provisions)

Section I.A.2 was added to the operating permit as part of the renewal process. The requirements in section I.A.2 are the general provisions of the federal NSPS. The enforceable requirement is listed in the second column of the table. The requirement number in the first column and the requirement paraphrase

in the 3rd column are for information only. In the event of conflict or omission between the information contained in the third column and the actual regulation cited in the second column, the requirements and language of the regulation cited shall govern. For more information regarding any of the requirements cited in the second column, refer to the actual requirements cited.

These requirements apply only to NSPS affected facilities identified in the permit at the time of issuance. In this case, Boeing Auburn has five boilers subject to 40 CFR Part 60, Subpart Dc. Four internal combustion engines identified by the applicant at the time of review are subject to the NSPS requirements in 40 CFR Part 60, Subpart IIII. The affected facilities covered by these Subparts are subject to the enforceable requirements listed in column 2 (for example, Subpart Dc). These Subparts are identified in the fourth column of the table. Section I.A.3 (US EPA NESHAP General Provisions).

Construction (including reconstruction) or modification of an affected facility after the date of permit issuance is subject to all applicable requirements in 40 CFR Part 60, Subpart A.

6.3 Section I.A.3 (US EPA NESHAP General Provisions)

Section I.A.3 was added to the operating permit as part of the renewal process. The requirements in section I.A.3 are the general provisions of the federal NESHAP. The enforceable requirement is listed in the second column of the table. The requirement number in the first column and the requirement paraphrase in the 3rd column are for information only. In the event of conflict or omission between the information contained in the third column and the actual regulation cited in the second column, the requirements and language of the regulation cited shall govern. For more information regarding any of the requirements cited in the second column, refer to the actual requirements cited.

These requirements apply only to NESHAP affected sources identified in the permit at the time of issuance. For most of these requirements, the permit identifies which 40 CFR 63 Subparts this includes (for example, Subparts GG, ZZZZ, DDDDD). These are identified in the fourth column of the table.

Applicability of General Provisions for Emergency RICE: 40 CFR 63.6665 specifies that for reciprocating internal combustion engines (RICE) that meet specific criteria listed in the section of the rule, the facility does not need to comply with any of the requirements of the General Provisions specified in Table 8 of 40 CFR Part 63, Subpart ZZZZ. Boeing Auburn has five engines that meet this criteria: existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP. Other existing emergency stationary RICE have a site rating less than 500 brake HP so are subject to the General Provisions. However, 40 CFR 63.6645 specifies that notification requirements in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b) through (e), and (g) and (h) do not apply to existing stationary emergency RICE.

New affected sources that have an initial startup after the date of permit issuance are subject to all applicable requirements in 40 CFR Part 63, Subpart A.

6.4 Section I.B. (Emission Unit Specific Applicable Requirements)

Section I.B. of the permit lists applicable requirements that are specific to an emission unit or activity.

Following the name of each emission unit is a brief description of the emission unit or activity and some identifying information such as location and installation date. Due to the size of Boeing Auburn and its complexity, the information is provided as an aid in understanding the permit and as an aid to locate a specific emission point or activity.

The Generally Applicable Requirements of Section I.A. apply to all the emission units listed in Section I.B. and are not repeated in this section. Monitoring Methods and Reference Methods are also identified if they are different or in addition to those listed in Section I.A.

Changes made for AOP Renewal: The composite processing operations emission unit has been removed during the renewal process since these operations no longer take place at the facility. Some have been combined with other emission units or renumbered to be consistent with other Boeing facility permits. Requirements that apply to RICE have been added (Emission Unit 4). Requirements that apply to Laser Cutting Operations and Plasma Cutting Operations have also been added (Emission Units 12 and 13).

There is section that is identified as “RESERVED” to maintain consistency in numbering in Section I.B. The intent of this renumbering is to standardize the organization of the Boeing AOPs. The reserved section refers to site remediation which does not occur at Boeing Auburn and electric curing ovens which do not have active Orders of Approval that apply to them.

New NOCOA conditions have been added to the permit renewal.

6.4.1 Coating, Cleaning, and Depainting Operations

This section includes all activities and equipment associated with surface coating, cleaning, and depainting operations that have specific applicable requirements other than the general requirements in Section I.A.1. These operations may include coating mixing, application, drying, and curing; spray gun cleaning; solvent wipe and solvent flush cleaning; depainting; and material and waste handling. Examples of equipment involved in these activities may include spray booths, paint hangars, and gun cleaning units.

The informational table was updated by the applicant as part of this renewal process and includes spray coating booths in operation at the facility. The last column in the table indicates whether Aerospace NESHAP (ANESHAP)-regulated coatings containing inorganic HAPs may be sprayed at the equipment at the time of permit issuance.

6.4.1.1 ANESHAP

Boeing Auburn conducts several activities that are subject to the ANESHAP. These include the following:

- Applicability and Exemptions are listed in I.B.1.1 through I.B.1.14 (required monitoring in Section II).
- Applicable requirements for ANESHAP cleaning are listed in I.B.1.15 through I.B.1.32 (required monitoring in Section II).
- Applicable requirements for ANESHAP coatings are listed in I.B.1.33 through I.B.1.52 (required monitoring in Section II).
- Applicable requirements for ANESHAP primer, topcoat and specialty coating inorganic HAP application operations are listed in I.B.1.53 through I.B.1.63 (required monitoring in Section II).
- Applicable requirements for ANESHAP waste handling operations are listed in I.B.1.64 through I.B.1.65 (required monitoring in Section II).
- The Boeing Auburn facility does not depaint completed aircraft. Requirements that apply specifically to depainting are not included in the permit. Section II.B.1(h) is marked “RESERVED” as a placeholder for ANESHAP Depainting Operations that applies at other Boeing facilities.

Although chemical milling maskant application and depainting of completed aircraft are regulated in the ANESHAP, Boeing Auburn does not conduct chemical milling maskant application or depainting of completed aircraft so it is not included in the list of general activities and the standards specific to these operations are not included in the permit. Chemical milling maskant application is included in the regulatory paraphrases in Requirements I.B.1.3, I.B.1.4 (exemptions), I.B.1.9 (averaging provisions), and I.B.1.64 (waste handling) since this language will be consistent for all Boeing facilities. Similarly, depainting is included in the description of Emission Unit 1, I.B.1.5 (exemptions), I.B.1.11 (exemptions), and I.B.1.64 (waste handling) It is not intended to imply that Boeing Auburn is permitted to conduct chemical milling maskant application operations or depainting operations without complying with the requirements in the NESHA.

Changes made for AOP Renewal: The permit has been updated to reflect revisions to the ANESHAP. This includes the following:

- Added new requirements that apply to specialty coatings.
- Updated the exemption list per 40 CFR 63.741.
- Added general duty clause in revised 40 CFR 63.743(e) to replace reference to general provisions.
- Updated paraphrasing to more accurately reflect language in rule.
- Deleted the requirement for Boeing Auburn to prepare and implement a startup, shutdown and malfunction plan for spray booths since this requirement has been removed from the NESHA.
- Added the option to use an interlock system to automatically shut down the coating spray application if pressure drop outside of manufacturer's recommendations since this option was added to the NESHA.
- Updated language pertaining to HAP-containing wastes to be consistent with revised NESHA. (Note that the compliance date for these requirements is December 11, 2018, per 51114 Federal Register / Vol. 81, No. 149 / Wednesday, August 3, 2016).

Averaging Provisions: 40 CFR 63.743(d) allows Boeing to use averaging provisions specified in 63.743(d)(1) through (d)(6) instead of complying with individual coating limits in 40 CFR 63.745. At time of issuance, Boeing Auburn is not using these averaging provisions. These citations are included in the operating permit, and the averaging scheme consistent with the regulations is included in the Title V operation permit. No change from existing permit.

EPA ANESHAP Determinations: The Agency specified in Requirement I.B.1.43 that Preval hand-held aerosol cans with a non-refillable pressurized portion qualify for the exemption under 40 CFR 63.745(f)(3)(v). This is based on an applicability determination by EPA Region 10 on October 14, 1998.

EPA issued a guidance document in fall of 2016 regarding the standards for handling and storage of waste in Section 40 CFR 63.748(a)(2). The document provides guidance only and does not impose legally binding requirements on the EPA, state regulators or the regulated industry. 40 CFR 63.748(a)(2) states all waste that contains organic HAP should be stored in closed containers. According to the guidance, the requirement to store waste in closed containers is only intended for HAP-containing waste that is not subject to the Resource Conservation and Recovery Act (RCRA) requirements in 40 CFR parts 260 through 268. Once a waste is determined to be a RCRA waste, it is not then or subsequently subject to the requirements in the ANESHAP. This appears to be consistent with the requirements in the rule that states

the requirements of this section do not apply to spent wastes that contain organic HAP that are subject to and handled and stored in compliance with 40 CFR parts 262 through 268. The guidance also specifies a waste does not contain organic HAP if it meets the criteria of non-HAP material in 63.742 (i.e., waste that contains no more than 0.1 percent by mass of any individual organic HAP that is an Occupational Safety and Health Administration (OSHA)-defined carcinogen as specified in 29 CFR §1910.1200(d)(4) (2011) (currently codified at Appendix A to 29 CFR §1910.1200—Health Hazard Criteria (Mandatory), §A.6.4), and no more than 1.0 percent by mass for any other individual HAP). Note that Section 63.742 of the regulations incorrectly specifies 29 CFR 1200(d)(4), a citation that will be updated in a future technical correction.

A material is not a waste requiring disposal in closed containers:

- If it does not contain “free liquids” (as defined in 40 CFR 260.10)
- If it’s within containers or liners rendered “empty” (as defined in 40 CFR 261.7) such as residues remaining in tubes, bottles, cups etc.
- Until such time that it is no longer suitable for its intended purpose. For example, a tube of adhesive that is partially used but has now set up to the point it is no longer useable.

6.4.1.2 Local Regulations and NOCOA Conditions

Changes made during the operating permit renewal process include the following:

- PSCAA Regulation I, Section 9.16 has been updated. Aerospace coating operations subject to the ANESHAP are exempt from the provisions of Regulation I, Section 9.16(c), (d) and (e). Boeing Auburn does not conduct mobile spray-coating operations under Section 9.16(e).
- Added new NOCOAs pertaining to spray coating operations and applicable conditions.
- Removed NOCOAs for equipment that is no longer operating and has been removed from the facility or has been cancelled and superseded by more recent Orders.
- Removed NOCOA 7745 issued on May 5, 1999, which approved an alternative means of compliance with Regulation II, Section 3.09(b) in accordance with Regulation I, Section 3.23. Based on an e-mail received on April 19, 2024, this approval is no longer needed. The Temporary Protective Coating (TPC) that was the subject of this Order (AZ 643-GFC Blue Aerosol) is no longer used at the Auburn facility. The TPCs in use comply with the VOC limits in Reg II, Section 3.09(b). The Order has been inactivated. The alternative means of compliance under NOCOA 8339 has been removed and rendered inactive based on an e-mail received on November 10, 2023, that non-HVLP spray guns are no longer in use. The alternative means of compliance under NOCOA 6756 issued on February 4, 1997 has been removed and rendered inactive based on an e-mail received on May 6, 2024, that review of TPC applied do not fit the scenario described under NOCOA 6756.
- Several permits for existing spray booths have conditions that would be cancelled and superseded by conditions in the proposed NOCOA 12241. Approval of this NOCOA would allow for the use of interlock systems in lieu of reading and recording the pressure drop and to remove redundant conditions. This NOCOA is open for comment at the same time as the operating permit renewal since conditions would contravene existing permit conditions. The proposed language has been included and the original language has been deleted from the air operating permit. NOCOA 12241 would be issued at the same time as the air operating permit.

Besides coating aerospace parts in spray booths, Boeing Auburn sometimes coats parts for motor vehicles and mobile equipment. When Boeing Auburn conducts such activity, Regulation II, Section 3.04, which sets limits on the VOC content of the coatings, would apply. The monitoring method requires Boeing Auburn to keep records of the VOC content of each motor vehicle coating and verify that the coatings being applied meet the requirements. In a June 30, 2001, letter, the Agency provided concurrence that mobile equipment as it relates to Boeing facilities is intended to mean equipment that is licensed or likely to be licensed to operate on a public roadway. Jigs and carts used to move parts and equipment in and around buildings at Boeing facilities would not be mobile equipment. However, trucks and trailers the move parts between Boeing facilities would be subject to the requirements of the rule. The VOC limits in Regulation II, Section 3.04(a) apply to original equipment manufacturers so would not apply to this facility.

6.4.2 External Combustion

This section includes all boilers and heaters, including an autoclave and two curing ovens. Smaller combustion units, such as those that fit the definition of a hot water heater in 40 CFR Part 63, Subpart DDDDD, are not itemized.

6.4.2.1 Boiler NESHAP (40 CFR Part 63, Subpart DDDDD)

Boeing Auburn presently has ten boilers that are subject to Subpart DDDDD of 40 CFR 63.

Each of the boilers and heaters listed are “Units designed to burn gas 1” under 40 CFR Part 63, Subpart DDDDD. All boilers are gas-fired, and three have liquid fuel backup. Boilers and process heaters designed to burn gas 1 fuels are not subject to emission limits or operating limits in Subpart DDDDD. All boilers subject to the NESHAP are required to have tune-ups every 5 years since the boilers have a continuous oxygen trim system or are below the size threshold for more frequent tune-ups. The one-time energy assessment was required by January 31, 2016. Boeing Auburn has conducted the one-time energy assessment, so this is not an ongoing requirement. The facility did not submit the energy assessment to the Agency, but certified the assessment was completed in their March 31, 2016, Notification of Compliance Status. Boeing Auburn is required to maintain a record of the energy assessment in Section II.B.2.b.ii.

6.4.2.2 NSPS Subpart Dc - Applicability

The NSPS in 40 CFR 60 subpart Dc apply to steam generating units that commenced construction after June 9, 1989, and have a heat input rate of 100 million Btu/hr or less, but 10 million Btu/hour or greater. Five boilers at Boeing Auburn are subject to the NSPS and the requirements that apply to this unit are included in the permit. The applicability of the General Provisions in 40 CFR 60, Subpart A as they apply have been moved to Section A.2 of the operating permit.

6.4.2.3 Local Regulations

Regulation I, Section 9.03 opacity standards, and Regulation I, Section 9.08(a) and Revised Code of Washington, RCW Section 70.94.610 (1991) fuel standards apply to these units apply. The monitoring method has not been significantly revised from monitoring requirements in the existing operating permit.

6.4.2.4 NOCOA Conditions

Changes made during the operating permit renewal process include the following:

- Added new NOCOAs pertaining to external combustion operations and applicable conditions.
- NOCOA 10730 was approved in 2014 and applies to the natural gas fired autoclave in Building 17-45. The Order contains an emission limit for NO_x and CO, but only one time compliance test within 90 days of startup. The Agency has gap-filled and is requiring the unit be tested once during the permit term. Periodic testing to demonstrate compliance with the NO_x limit in the NOCOA will provide adequate assurance the unit is capable of being maintained in a manner consistent with emission limits. Testing can be conducted using either a hand-held analyzer or EPA Reference Test Methods.
- For NOC 12007 issued in 2021, Condition 8 was not included since the AOP requires records be kept for 5 years.

6.4.3 Abrasive Blasting, Cyclones, Baghouses, and Other Particulate Control Operations

This section has been modified to include all activities and equipment with particulate emissions controlled by cyclones, baghouses, and other control equipment. The list is limited to those sources that exhaust to the outside atmosphere and/or were subject to permitting or notification under Regulation I, Section 6.03(b) or (c). The table was updated by Boeing during the renewal process and provides a source description. Replacement or substantial alteration of any of the baghouses or other particulate control operations would require Boeing Auburn to file a notice of construction application in accordance with WAC 173-400-114. It is the facility's responsibility to verify and certify compliance with this requirement on an annual basis.

In addition to the visible emission and fallout monitoring included in the existing permit, the Agency has determined a requirement to monitor pressure drop across the control equipment is appropriate to assure compliance with applicable emission limits except for the specific units listed since these units are necessary for material recovery and were exempt from permitting requirements (Asset Nos. 20897, 20708, 20684, 17000, 24946, 9898 and 9899). The units do still act as control devices for fine particulate matter, so the other monitoring provisions still apply. Units permitted under NOCOA 2004 and 4192 that do not have a pressure differential gauge are required to install a gauge within 24 months of issuance of the renewal permit. The Agency determined that periodic compliance testing with the Reference Test Method is not necessary with the periodic monitoring included in the permit.

Other changes made during the operating permit renewal process include the following:

- Added new NOCOAs pertaining to activities and equipment with particulate emissions controlled by cyclones, baghouses, and other control equipment and applicable conditions.
- Removed NOCOAs for equipment that is no longer operating and has been removed from the facility or has been cancelled and superseded by more recent Orders.
- One permit that has been reviewed but not yet issued is NOCOA 12440. This dust collector is replacing an existing wet dust collector. The new dust collector satisfies the requirements in the regulation and inclusion does not contravene existing permit conditions, so these conditions have been included in the draft operating permit. If issued, the date of issuance will be included in the final operating permit. If the unit that this dust collector is replacing has been removed, that unit will be removed.

6.4.4 Stationary Internal Combustion Engines

This section has been added in this AOP renewal and includes all stationary RICE that are affected sources subject to the NSPS requirements in 40 CFR Part 60, Subpart IIII for Stationary Compression Ignition Internal Combustion Engines, and to the NESHAP requirements in 40 CFR 63, Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines. All engines are emergency engines as defined in the NESHAP.

6.4.5 Motor Vehicle Fueling Operations

The gasoline station at the facility consists of a gasoline station with one 10,000-gallon underground storage tank with stage 1 VRE. Gasoline throughput at the station is less than 600,000 gallons annually.

The permit has been updated to include the 2012 version of Regulation II, Section 2.07 as “State Only” requirements since the Agency has not requested and EPA has not been approved this version of our regulation in our SIP. The 1999 version of the regulation which is in the SIP (Regulation II, Section 2.07) specifies inspections and their frequency.

The monitoring requirement in the AOP requires routine inspection and repair of defects within seven days after inspection. The AOP renewal has been modified to allow for inspection every seven days as an alternate to inspection after every product delivery. Although uncommon, product deliveries may occur more frequently than once a week.

6.4.6 Storage Tanks

This is an existing tank that has not been modified. The tank was installed prior to July 23, 1984, so is not subject to the provisions of 40 CFR 60 Subpart Kb.

6.4.7 Wood Furniture Operations

Boeing Auburn only conducts incidental wood furniture manufacturing activities that have specific applicable requirements in 40 CFR Part 63, Subpart JJ - National Emission Standards for Wood Furniture Manufacturing Operations. There were no changes in the permit renewal.

6.4.8 Composite Processing Operations

This section was deleted during the operating permit renewal. The only product that contains the styrene monomer as a reactive monomer for the resin used at Boeing in recent years is a putty used on non-production parts. This use would not be considered to be manufacturing operations. Therefore, the Agency determined that this activity did not meet the applicability criteria in Regulation II Section 3.08(a), and therefore that regulation does not apply.

6.4.9 Remediation

This section was marked as “RESERVED” during the operating permit renewal since Boeing Auburn is not conducting operations subject to the Site Remediation NESHAP.

6.4.10 Wastewater Treatment Operations

In this renewal, the Agency removed the requirements in 40 CFR Part 63, Subpart DD for Off-site Waste and Recovery Operations since we determined this NESHAP did not apply. Boeing Auburn provided additional information in an e-mail submitted on May 29, 2020, indicating they believed the determination that Subpart DD was applicable was made in error.

The Boeing Auburn Wastewater Pretreatment Plant (WPP) periodically processes wastewater received from the Boeing Frederickson plant for processing in the WPP. It is this activity that has the potential to lead to Subpart DD applicability for Auburn based on this citation.

63.680(a)(2)(ii) A waste management operation that treats wastewater which is an off-site material and the operation is exempted from regulation as a hazardous waste treatment, storage, and disposal facility under 40 CFR 264.1(g)(6) or 40 CFR 265.1(c)(10).

There are two distinct types of wastewater that Auburn receives from Frederickson. The first, spent acid, does not qualify under 63.680(2)(ii) because the wastewater does not contain any volatile HAPs listed in Table 1 of Subpart DD, so it does not qualify as an off-site material, per 63.680(b)(1)(iii). The second type of wastewater, non-hazardous wastewater, has the potential to contain glycol ethers, a HAP listed in Table 1, thereby meeting the definition of off-site material. However, the Auburn WPP does not “treat” this non-hazardous wastewater. While “treat” is not defined, Subpart DD does define the following:

63.681 Treatment process means a process in which an off-site material stream is physically, chemically, thermally, or biologically treated to destroy, degrade, or remove hazardous air pollutants contained in the off-site material. A treatment process can be composed of a single unit (e.g., a steam stripper) or a series of units (e.g., a wastewater treatment system). A treatment process can be used to treat one or more off-site material streams at the same time.

The WPP does not destroy, degrade, or remove glycol ethers contained in non-hazardous wastewater. The Auburn WPP is designed for the removal of metals and oil only, allowing the glycol ethers to pass through the plant to be discharged to the WPP. In an e-mail received on March 11, 2024, Boeing Auburn staff noted that the addition of oxidizing agents is the method of treatment for wastewater containing glycol ethers and no oxidizing agents are added in any steps occurring at the WPP since the purpose of the plant is chrome reduction. Additional information was submitted on March 18, 2024 noting both sand filtration and flocculation via addition of polymer (both processes which can be considered as physical and/or chemical pretreatment) steps at the WPP do not treat for glycol ethers. There is no change in wastewater temperature occurring and no microorganisms added at any point WPP processes, so thermal and biological pretreatment is not possible.

6.4.11 Chemical Process Tankline Operations

The applicant updated the informational table describing chemical tankline operations as part of this renewal process. A source description has been added since the previous permit just included the control equipment and not the source of emissions. Replacement or substantial alteration of any of the scrubbers would require Boeing Auburn to file a notice of construction application in accordance with WAC 173-400-114. It is the facility’s responsibility to verify and certify compliance with this requirement on an annual basis.

New NOCOAs issued since the previous permit have been added with applicable permit conditions.

The monitoring method requires routine inspections of each scrubber for proper scrubber pump operation, nozzle inspection for pluggage and even flow, and inspections for leaks and visible emissions. In addition, the AOP renewal specifies standardized flowrate, pH, pressure drop monitoring and recordkeeping with a requirement to identify the acceptable ranges for these parameters. Although some NOCOAs include specific monitoring requirements for flowrate, pH, and pressure drop, most NOCOAs

were absent such requirements. This baseline monitoring is required for all scrubbers to verify the scrubbers are maintained and operated in good working order.

Frequency of monitoring flowrate, pH and pressure drop has been defaulted to monthly in the renewed AOP. These parameters do not change markedly on a day-to-day basis so monthly monitoring is sufficient. Differential pressure monitoring across packed bed scrubbers should be based on pressure taps on each side of the packed bed. This is consistent with language in 40 CFR 63.344(d)(5)(i)(B). Note that Boeing Auburn does not operate any sources subject to 40 CFR 63, Subpart N.

The majority of scrubbers at Boeing Auburn do not rely on pH control to ensure good scrubber performance. The scrubber liquor is city water without additives (other than those used to prevent biogrowth). The pH of these scrubbers are kept near neutral through the continuous addition of city water and overflow of scrubber liquor to the site wastewater treatment plant. Two operating scenarios where maintaining pH is important to scrubber performance are: 1) scrubbers that use an additive for purposes of reducing nitrogen dioxide emissions; and 2) scrubbers controlling exhausts with higher acid concentrations (acid scrubber). In these cases, the higher pH of the scrubber liquor is important to ensure good scrubber performance. These scrubbers are subject to pH monitoring.

6.4.12 Electric Autoclaves and Ovens

This section has been marked as “RESERVED” during the operating permit renewal since Boeing Auburn does not have electric autoclaves and ovens permitted under an NOCOA. Boeing Auburn operates several electric ovens that are categorically exempt from permitting requirements under Regulation I, Section 6.03(c)(62). This exemption did not exist when most spray booths and associated ovens were built at Boeing Auburn. Several were included with older NOCOA’s, often combined with other equipment in the NOCOA project description. As these NOCOA’s were updated, references to the ovens have been removed.

There is one electric oven that was permitted under NOCOA 2096 that remained in our database. Based on review of the original worksheet, this oven was included with three other related units – one flash off tunnel, one primer/topcoat paint booth and one large oven. The technical worksheet completed by the reviewing engineer notes that most of the VOCs are emitted before the oven. There are no specific conditions that apply. Each of these units was approved under a separate NOCOA – 2095, 2096, 2097 and 2098. The spray booth has been modified and permitted under NOCOA 7279 which cancelled and superseded NOCOA 2097. NOCOA 2095 and 2098 are no longer active. The Agency has determined that based on a review of technical information, this electric oven does not need to be permitted and NOCOA 2096 is considered obsolete.

6.4.13 Laser and Plasma Cutting Operations

This section has been added this emission unit during the renewal process. NOCOAs were all issued after 2009. Specific monitoring and recordkeeping requirements are included in the NOCOAs. This monitoring has been supplemented with the facility inspections when there was no monitoring for a specific condition, or the monitoring was determined to be insufficient.

7 Monitoring, Maintenance and Recordkeeping Procedures

Emission testing conducted to determine compliance with an emission standard must comply with the requirements in Section V.N of the permit. However, Boeing Auburn is not required to provide PSCAA with advance notification of an Ecology Method 9A test if the testing is conducted as part of the facility-wide

opacity monitoring method in Section II.A.1(a) or the Emission Unit specific monitoring in Section II.B. For example, if Boeing Auburn observed visible emissions and then performed a Method 9A observation, the results of that observation can be used to demonstrate compliance, even if Boeing Auburn did not notify the Agency.

Boeing Auburn must follow the procedures contained in Section II of the permit, Monitoring, Maintenance and Recordkeeping Procedures. Not following a requirement of Section II is a deviation of Section II and Boeing Auburn must report such deviations, as well as deviations from any other permit condition, as a deviation under Section V.Q.1 of the permit. In addition, all information collected as a result of implementing Section II can be used as credible evidence under Section V.N.2 of the permit. Reporting a permit deviation and taking corrective action does not relieve Boeing Auburn from its obligation to comply with the underlying applicable requirement.

Changes made for AOP Renewal: Regulation citations were updated, and the following changes were made:

- The section was reformatted.
- The section has been updated to reflect any new or modified monitoring, recordkeeping and reporting requirements since issuance of the 2004 permit.
- Gap-filling provisions were updated. See additional discussion under Section 6.1 of this Statement of Basis.

7.1 Standard Approval Conditions

A standard PSCAA NOCOA condition, Condition No. 1, requires that the equipment, device or process be installed according to plans and specifications submitted to PSCAA. Once the equipment is installed, PSCAA requires certification by the applicant that the installation was as approved; this is done with a Notice of Completion. While the Notice of Completion is a one-time requirement that Boeing Auburn has complied with, Boeing Auburn cannot change the approved equipment in such a manner that requires an NOCOA without first obtaining an NOCOA which is addressed in Section IV.A of the permit.

Another standard approval condition on some of the NOCOAs requires the applicant to develop and implement an O&M Plan for the equipment approved in the NOCOA. The Clean Air Agency considers that condition obsolete and superseded it with Regulation I, Section 7.09(b) which requires development of an O&M Plan for all equipment.

A third standard approval condition informs the applicant that the approval does not relieve the applicant from complying with other applicable requirements. This is for information purposes only and no monitoring is required, hence the approval condition is not listed in the permit.

7.2 NOCOA Specific Obsolete Requirements

Several NOCOA conditions were determined to be obsolete and not included in the AOP renewal. This included NOCOA conditions that required records be maintained for 5 years since that is a requirement included in Section V.O. This includes NOCOA 12327, Condition 10, NOCOA 12007, Condition 8, NOCOA 11663, Condition 10, NOCOA 11567, Condition 12, NOCOA 11528, Condition 16, NOCOA 11453, Condition 9, NOCOA 11388, Condition 9, NOCOA 11312, Condition 7, NOCOA 10730, Condition 7, NOCOA 10653, Condition 9, and NOCOA 9133, Condition 4, NOCOA 8506, Condition 7.

Conditions from other NOCOAs were removed if they were cancelled and superseded by a newer NOCOA since the previous permit issuance. This included conditions in NOCOA 11312, NOCOA 10974, NOCOA 10846, NOCOA 3587, NOCOA 7263, NOCOA 6109, NOCOA 3842, NOCOA 9864, NOCOA 8669, NOCOA 6549, NOCOA 6760, NOCOA 8029, NOCOA 8543, and NOCOA 8542.

Upon issuance of NOCOA 12441, the following conditions would be cancelled and superseded with conditions in this Order: NOCOA No. 7279, Condition Nos. 4 and 5, dated 2/24/1998, NOCOA No. 7302, Condition Nos. 4 and 5, dated 3/31/1998, NOCOA No. 7639, Condition No. 4, dated 12/15/1998, NOCOA No. 7689, Condition No. 4, dated 4/9/1999, NOCOA No. 7941, Condition No. 4, dated 11/2/1999, NOCOA No. 8747, Condition No. 7, dated 12/19/2002, NOCOA No. 8835, Condition No. 6, dated 7/1/2003, NOCOA No. 10234, Condition No. 6, dated 1/11/2011, NOCOA No. 10332, Condition Nos. 5 and 6, dated 7/14/2011, and NOCOA No. 10846, Condition No. 9, dated 10/23/2014.

Upon issuance of NOCOA 12441, the following conditions would be cancelled: NOCOA No. 7279, Condition No. 6, dated 2/24/1998, NOCOA No. 8747, Condition No. 4, dated 12/19/2002, NOCOA No. 8835, Condition No. 4, dated 7/1/2003, and NOCOA No. 10298, Condition No. 3, dated 5/18/2011.

8 Prohibited Activities

Some of the requirements Boeing Auburn identified in the operating permit application are included in Section III as prohibited activities. Personnel that perform the facility inspections, required in Section II of the permit, should be aware of these requirements and if they find any evidence that any of these activities are being conducted, they should take appropriate action to investigate them and take corrective action if necessary.

Changes made for AOP Renewal: Regulation citations were updated, and requirement paraphrasing was modified to be more consistent with the cited regulation. Concealment and masking requirements in the WAC and PSCAA regulations were combined under one section, but the Part 61 concealment provision was moved to its own section. Provisions that apply to tampering in WAC 173-400-105(8) and false statements in WAC 173-400-105(6) were also included in this section, but are not federally enforceable. A statement was added specifying compliance with applicable requirements shall be monitored through "Documentation on File" and "Facility Inspections".

9 Activities Requiring Additional Approval

Some of the requirements Boeing Auburn identified in the operating permit application are included in Section IV as activities that require additional approval.

Changes made for AOP Renewal: Regulation citations were updated, and requirement paraphrasing was modified to be more consistent with the cited regulation. Sections to address new source notification requirements and Notices of Completion were added. PSD permitting requirements were also added since this is an applicable requirement although it is implemented through Ecology. The requirements for spray coating in PSCAA Regulation I, Section 9.16 were moved to the emission unit specific requirements. Requirements that apply to nonroad engines in Article 15 were also added to this section. As part of the renewal process, the Agency reviewed these requirements to verify all met the definition of applicable requirement in WAC 173-401-200. A statement was added specifying compliance with applicable requirements shall be monitored through "Documentation on File" and "Facility Inspections".

9.1 New Source Review

For new source review, the Agency has adopted by reference in Regulation I, Section 6.01(a) requirements in WAC 173-400 and WAC 173-460 that apply in our jurisdiction. This includes PSD requirements, but Regulation I, Section 6.03(b) clarifies that Ecology is the permitting agency for the PSD program.

PSCAA Regulation I, 6.03(b), notifications and 6.03(c), exemptions, lists sources for which a Notice of Construction application and NOCOA are not required. For purposes of complying with the recordkeeping requirement in Regulation I, 6.03(c) for exemptions, Boeing Auburn shall provide in a timely manner, upon request by the Agency, any information reasonably necessary to document the exemption. Boeing Auburn currently maintains a log of all determinations of categorically exempt equipment listed in Regulation I, Section 6.03(c). However, physical evidence of the emission unit or activity itself can often fully document the applicability of the exemption. For example, the nameplate on an emission unit can document its rated capacity. Similarly, simply observing an emission unit, such as handheld sanding equipment, can fully demonstrate the applicability of an exemption.

In addition, Boeing Auburn can request the Agency review a source not otherwise exempt under Regulation I, Section 6.03(c) to determine if an Order of Approval is warranted. In accordance with Regulation I, Section 6.03(b)(10), the Agency has determined the following sources to be exempt through review of a Notice of Construction application because the source has a de minimus impact on air quality and does not pose a threat to human health or the environment:

NOCOA	Application Submitted	Process Description
8775	10/18/2002	Temporary tanklines used for R&D
8800	12/2/2002	Spray booth
9610	3/29/2007	Ultrasonic cleaner (5/8/07)
9625	4/4/2007	Ultrasonic cleaner (5/10/07)
9784	1/24/2008	Laser cutter (3/21/08)
9907	10/9/2008	Heated ultra-sonic cleaning tanks
9922	11/7/2008	Alkaline etch tank (12/12/08)
10413	11/1/2011	Replacement laser marking system (12/9/11)
10604	4/29/2013	One solvent recycling system (5/14/13)
10712	12/17/2013	Hold tank for chemical solution temporary storage used when emergencies occur, or maintenance activities need to be performed on other tanks. (2/3/14)
10799	6/23/2014	Hand application of small-scale acid etchant and acid pickle (7/9/14)
10864	12/17/2014	Ventilation of a rinse tank for chemical processing (1/15/15)
10882	2/4/2015	Small-scale twin arc sprayer (5/11/15)
10973	6/22/2015	Stringer wiping mechanism (9/2/15)

NOCOA	Application Submitted	Process Description
11182	5/31/2016	One laser cleaner for die cleaning located at the Boeing Advanced Metal Structures (AMS) business unit located in the 17-68 Building (7/5/16)
11646	8/7/2018	Removal of scrubber controlling emissions from previously installed tank lines that would be exempt from permitting under current regulations (4/27/22)
11975	3/27/2020	Control devices attached to two mills used to cut paper-based composites that would otherwise be exempt (4/12/2022)

9.2 Nonroad Engines

This new section IV.F. sets forth requirements of WAC 173-400-035 and PSCAA Regulation I, Article 15 concerning internal combustion engines that are classified as nonroad engines. These meet the requirements of applicable requirement as defined in WAC 173-401-200 which include rules adopted under Chapter 70.94 as they apply to emission units in a chapter 401 source. "Emissions unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant, or any pollutant listed under section 112(b) of the FCAA.

10 Standard Terms and Conditions

Some of the requirements Boeing Auburn identified in the operating permit application are included in Section V, Standard Terms and Conditions. This section also contains the standard terms and conditions specifically listed in WAC 173-401-620.

Changes made for AOP Renewal: Regulation citations were updated, and requirement paraphrasing was modified to be more consistent with the cited regulation. The regulatory language for compliance determinations in Section V.N.1 was updated to be consistent with the 3/23/06 regulation. The language in V.O. General Recordkeeping was updated and NESHAP and NSPS recordkeeping requirements were moved into Sections I or II, as appropriate.

The data recovery section in Section V.P was updated to be more consistent with other operating permits issued by the Agency and other agencies within the State.

The General Reporting section under Section V.Q.1 was updated to reflect the change to Regulation I, Section 7.09(c) that all required compliance reports shall be submitted in electronic format as an attachment to an e-mail. Not hard copy is required.

The affirmative defense provisions provided for in Title V of the Clean Air Act were deleted from the implementing federal rules in section 70.6(g) as of August 21, 2023. Although the WAC language has not yet been removed from the state regulation and EPA's approval of our program still contains this provision, the Federal Register Notice recommended that the emergency affirmative defense not be included in Title V permits issued after the effective date of the Federal Register Notice.

The Agency has updated Section V.R of the permit which addresses excess emissions to be consistent with Ecology's updated regulations. On August 16, 2018, Ecology amended WAC 173-400 to remove exceptions for emissions during startup, shutdown, and malfunction to comply with EPA's direction in

the startup, shutdown, and malfunction SIP call. WAC 173-400-107 (Excess Emissions) is currently in effect and was approved in the PSCAA SIP on September 20, 1993. The requirements of WAC 173-400-107 are included in the AOP. WAC 173-400-107 and these permit conditions will remain in effect until the effective date of EPA's removal of the September 20, 1993 version of this section from the PSCAA SIP. Upon the effective date of EPA's removal of the September 20, 1993 version of WAC 173-400-107 from the PSCAA SIP, WAC 173-400-108 (Excess Emissions Reporting) and WAC 173-400-109 (Unavoidable Excess Emissions) will take effect.

Section V.V of the permit pertaining to risk management programs has been updated to be consistent with the 12/3/18 version of the regulation.

10.1 Reporting

Section V.Q of the AOP lists the reports that Boeing Auburn must submit, and the responsible official must certify the report.

Changes made for AOP Renewal: The reports listed in this section have been updated. The requirement to report emissions of greenhouse gases to Ecology has been added. The reporting requirement in 40 CFR 63.9(j) has been moved to Section I.A.3, NESHAP General Provisions. Obsolete reporting requirements have been removed. Reporting requirements for the Aerospace, Boiler and RICE NESHAPs have been updated to reflect the regulation at time of permit issuance. The requirement for submitting compliance reports in electronic format in accordance with Regulation I, Section 7.09(c) was added.

The language in Section V.Q.1.c, Certification by Responsible Official, has been updated to reflect the language in WAC 173-401-520. In addition, the applications forms, reports, and compliance certifications that must be certified upon submittal are listed. The only change made to this list as part of the renewal process was to add the Permit Renewal (WAC 173-401-710) and the Boiler NESHAP compliance report (40 CFR 63.7550) since these reports need to be certified upon submittal. For all other application forms, reports and compliance reports, the responsible official's certification needs only to be submitted once every six months, covering all required reporting since the date of the last certification, provided that the certification specifically identifies all documents subject to the certification. This is consistent with the language in WAC 173-401-615(3) and (3)(a) which requires the permit incorporate all applicable reporting requirements and submittal of any required reports at least once every six months.

To clarify which submittals need to be certified by a responsible official, the table in Section V.Q.3. was updated. The determination of which submittals need to be certified by the responsible official was based on WAC 173-401-520 and WAC 173-401-600(1). WAC 173-401-520 requires that, "Any application form, report, or compliance certification submitted pursuant to this chapter shall contain certification by a responsible official of truth, accuracy and completeness." WAC 173-401-600(1) requires that "each permit shall contain terms and conditions that assure compliance with all applicable requirements at the time of permit issuance." The permit contains all terms and conditions required by WAC 173-401-600(1), including requirements to submit application forms, reports and compliance certifications. Because these application forms, reports and compliance certifications are required to be submitted by WAC 173-401-600(1), the requirement to certify these submittals in WAC 173-401-520 applies.

The language providing Boeing Auburn with an option to report problems identified but not corrected within 24 hours that is associated with gap filling measures has been retained. However, an identification of noncompliance with the permit would have to be reported in accordance with the deviation reporting requirements in Section V.Q.1.b. If Boeing Auburn does not take corrective action as specified in the monitoring method (including shutting down the equipment or activity), the submittal of the report would

satisfy the monitoring requirement only. The deviation would pertain to the noncompliance issue, but would not be considered noncompliance with the monitoring method itself.

11 Permit Shield

The permit shield applies to all requirements contained in Sections I through VI of the permit, including a monitoring, maintenance, recordkeeping, and reporting requirements.

12 Attachments to Statement of Basis

All active NOCOAs are attached to this Statement of Basis. The applicable conditions have been included in the operating permit.

13 Attachments in Previous Statement of Basis

Agency staff reviewed all the attachments in the original Statement of Basis. Many of the attachments included in the previous Statement of Basis were made when the operating permit program and ANESHAP were first implemented so Agency clarification was appropriate. Because most of these attachments are over ten years old, the Agency determined clarification or interpretation in these attachments is no longer needed either because the permit specifically addresses or the regulations have been amended making the attachment obsolete. The exclusion of these attachments does not preclude the attachment from being used in a later interpretation by the Agency. A discussion of each attachment is provided below:

- Attachment A: The March 29, 2002 emission report was included in the Statement of Basis. This included the 2000 Air Contaminant Emission Summary. This has been replaced with the information in Section 2.2.
- Attachment B: A letter from Boeing sent to Rick Hess clarifying the contents of the O&M Manual and the Agency's response (2001) was not included. The Agency will defer to Regulation I, Section 7.09(b) regarding what needs to be addressed in the O&M Plan. These requirements are specific to equipment and control equipment and control measures to be employed to assure compliance with Regulation I, Section 9.15.
- Attachment C: A letter from the Agency to Barbara Thompson, Director of Environmental Affairs (May 1, 2002) noting that systematic problems identified or brought to the attention of Agency inspectors, will result in a request to review procedures and documentation addressing work practice to determine if a system is in place, as well as where it appeared to have failed. It was noted that the process may involve interviewing employees. We do not believe this letter is relevant to the current operating permit.
- Attachment D: An e-mail from Steve Van Slyke to Barbara Thompson (September 14, 2001) pertaining to documentation requirements with respect to Regulation I, Section 6.03. The information in this attachment is included in Section 9.1 above. Inclusion of the attachment is unnecessary.

Similarly, attachments included in the previous AOP were reviewed:

- Attachment 1: Letter from Neal Shulman to David Moore (January 15, 1998). Agency determination for determining solvent composition limits. The Agency believes language in the rule is clear and the attachment has been deleted.

- Attachment 2: A letter from James Nolan to Robin Bennett (November 30, 1999) regarding monitoring, maintenance and recordkeeping requirements for work practices regulation under 40 CFR 63.744(a). This letter is obsolete.
- Attachment 3: A letter from Jay Willenberg to Edward Cierebiej (September 21, 1999) providing comment on a draft semiannual compliance report. This letter is obsolete.
- Attachment 4: EPA Region 10 applicability determination made in 1998. Since the requirement specifically states Preval hand-held aerosol cans are exempt, this attachment is unnecessary and has been deleted.
- Attachment 5: A 1999 determination clarifying manufacturer's representations in MSDS. This is outdated and has not been added. The Agency will use the language in the regulations.
- Attachment 6: EPA concurrence of the 1999 determination clarifying manufacturer's representations in MSDS. This is outdated and has not been added. The Agency will use the language in the regulations.
- Attachment 7 (1/9/98) and Attachment 12 (10/10/01): The Agency clarified in the 1/9/98 letter that a NOCOA is required for major changes in control technology or changes that increase emissions. Major changes include changing control technology from waterwash to dry filters and increasing airflow by more than 10 or 15% over originally permitted levels as it pertained to spray booth. This criteria was extended to scrubbers and baghouses in 10/10/01 letter provided the alteration does not expand or increase the emission generation activity which the control equipment is supporting. Minor changes include adding an additional stage to a dry filter to meet the ANESHAP and moving an existing booth to a new location within the same facility and conducting the same activity. These attachments were not included. The Agency would review these modifications on a case-by-case basis in making this determination for future modifications.
- Attachment 8: May 8, 1995 determination regarding rule applicability for cold solvent cleaners. This regulation is no longer in place, so this applicability determination is obsolete.
- Attachment 9: Agency concurrence of definitions of mobile equipment (2001). This was consistent with regulatory definition of mobile equipment in Regulation II, Section 1.05 (6/13/91). The definition was removed in the 7/24/03 revision to the regulation since it was considered unnecessary, but the original language has been added to the emission unit description in the operating permit. Jigs and cars used to move parts and equipment in and around buildings at Boeing facilities would not be mobile equipment. However, trucks and trailers the move parts between Boeing facilities would be subject to the requirements of the rule. The attachment has been removed, but this exclusion does not imply that the determination made is not valid.
- Attachment 10: On February 27, 1996, the Agency granted an exemption request for an adhesive coating operation conducted in the 24-50 building from Regulation I, Section 9.16. This letter is no longer valid.
- Attachment 11: New source requirements for spray gun cleaning operations dated 1/18/02. The Agency has not required spray gun cleaning operations to obtain a separate NOCOA, although we would expect solvents used to be included in emission estimates with spray operations that are permitted by the Agency. This attachment has not been included.

- Attachment 13: January 16, 2002 letter regarding applicability of Regulation III, Section 3.05. This regulation is no longer in place. This determination is obsolete.
- Attachment 14: August 10, 1999 letter from David Kircher (PSCAA) to Charles Austin (Boeing) regarding applicability of small containers used for immersions cleaning with acetone of Regulation III, Section 3.05. This regulation is no longer in place. This determination is obsolete.
- Attachment 15: August 1, 1996 letter from Abigail Lee (PSCAA) to Chris Morris (Boeing Everett) that hand wipe cleaning operations are not included as flush cleaning. This meets the definition in the Aerospace NESHAP and inclusion of this attachment is not necessary.
- Attachment 16: February 26, 1993 letter from Abigail Lee (PSCAA) to J.T. Johnston (Boeing) regarding recordkeeping requirements for operation of fume hoods and ovens unless a specific condition or other regulatory requirement applies. The Agency noted the maintenance of the fume hood or oven has no net effect on limiting emissions to the atmosphere. The attachment has been removed but the determination remains valid.
- Attachment 17: January 2, 2003 e-mail from Agata McIntyre (PSCAA) to John Fosberg (Boeing) agreeing with Boeing's interpretation of monthly and weekly when these terms are not accompanied with the word "calendar". The attachment has been removed but this is consistent with the Agency's implementation of these requirements.

14 Public Comments and Responses

In accordance with WAC 173-401-800, the Agency provided public notice for this permit renewal. The comment period started on May 10, 2024 and continued through June 10, 2024. The 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 May 9, 2024. Notice was also published in Ecology's Permit Register.