Statement of Basis for
The Boeing Commercial Airplane Group - Boeing Renton Facility
Operating Permit 13125, Renewal #1
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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
CIC	Corrosion Inhibiting Compound
DOE or 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
NOC	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 permit conditions in the air operating permit to be issued to the Boeing Commercial Airplanes – Renton (Boeing Renton) 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 Renton's air emissions and provides a description of the activities taking place at Boeing Renton, including a compliance history.

2 Source Description

2.1 Why Boeing Renton is an Air Operating Permit Source

Boeing Renton qualifies as a major source and is required to obtain an operating permit because it emits more than 100 tons per year (tpy) of volatile organic compounds (VOCs), more than 25 tpy of total hazardous air pollutants (HAPs), and more than 10 tpy of certain specific HAPs. The major sources of VOC and HAP emissions are from the use of solvents and coatings used to support cleaning and coating operations associated with aircraft assembly and manufacturing.

2.2 Emission Inventory

The following table summarizes the HAP, TAC, and criteria pollutant (e.g. VOC) emissions from Boeing Renton over the last five years. The information is presented in tons per year.

Table 1. Emission inventory summary 2011-2015, tons per year

Pollutant	2015	2014	2013	2012	2011
CO	<25	<25	<25	<25	<25
NO2	33	36	40	36	37
HAP	49	61	57	56	52
TAC	104	125	113	111	90
VOC	259	276	254	237	214
PM10	<25	<25	<25	<25	<25
PM2.5	<25	<25	<25	<25	<25
SO2	<25	<25	<25	<25	<25

2.3 Process Description

The Airplane Programs manufacturing site in Renton, Washington, encompasses 4.3 million square feet (380,902 square meters) of building space and assembles single-aisle commercial airplanes. It is currently producing Next-Generation 737 and 737 MAX-based airplanes. The Next Generation 737 is the name given to the −600/-700/-800/-900 series of the Boeing 737 aircraft. Currently, only the 737-700, -800, and -900ER Next Generation 737 are produced. The 737 MAX series will eventually supplant the Next Generation 737.

The facility is located on Logan Avenue in an industrialized area of the city of Renton, adjacent to the Renton Airfield. Operations at the facility include machining, part assembly, primer, topcoat and specialty coating application, solvent cleaning, and facility and equipment maintenance and support activities.

Boeing Commercial Airplanes completes assembly of all 737s at its Renton facility; however, parts for the airplanes come from suppliers all over the world. The fuselage of the airplane is produced at a supplier plant in Wichita, Kansas. The assembled fuselages are transported by rail to the Renton factory. During the first stages of final assembly, insulation material is installed along the inside walls of the fuselage, then wiring and plumbing is added. Next, the landing gear and wings (which are entirely produced in Renton) are installed. At this point, the 737 takes its position in the moving production line. Near the beginning of the moving line, the tailfin is attached. Next, floor panels and serving galleys are installed and functional testing of hydraulic and electrical systems begins. As the airplane moves closer to the end of the line, the rest of the interior is completed - lavatories, luggage bins, ceiling panels, carpets, seats and other essentials. Right before the 737 exits the final assembly factory, mechanics attach the jet engines. Once assembled, the airplane is towed to a hangar for painting. About 50 gallons (189 liters) of paint are used on an average 737. When painting is complete, the airplane is ready for a more functional testing on the flight line (first engine run, etc.), and finally the aircraft's first flight which usually ends at Boeing Field in Seattle.

3 Review of Permit Application

3.1 Initial Air Operating Permit

Initial AOP: The original air operating permit 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 and/or plant contacts. Requests for these changes were received by the Agency on July 2, 2004, May 10, 2005, August 17, 2005, August 17, 2005, February 17, 2006, March 17, 2010, March 30, 2011, and April 9, 2015.

Significant Modification 1: On February 16, 2006 the Agency received a significant permit modification request from the Boeing Renton facility. The following modifications were requested:

1) Add applicable requirements regarding a new 64 MMBtu/hr natural gas boiler that was permitted under a Notice of Construction Order of Approval (OA) No. 9068 to the Air Operating Permit. This new boiler is subject to boiler New Source Performance Standard (NSPS) requirements under 40 CFR 60 Subpart Dc and boiler National Emissions Standard for Hazardous Air Pollutants (NESHAP) requirements under 40 CFR 63 Subpart DDDDD.
2) Add applicable requirements regarding a new 764 hp generator that was permitted under a Notice of Construction OA No. 9084 to the Air Operating Permit. This new generator is subject to RICE NESHAP requirements under 40 CFR 63 Subpart ZZZZ.
3) Delete from the equipment tables a number of pieces of process equipment that had been removed from the facility.

The application was found to be complete on March 14, 2006. A significant modification was issued on May 2, 2007.

3.2 Renewal

A renewal application letter was received on January 18, 2008, and a completeness letter was issued on February 1, 2008. Boeing Renton has been operating under the application shield provision of WAC 173-400-705(2). Changes made to specific sections are described within the appropriate requirement descriptions below throughout this Statement of Basis. Permit-wide changes include:

- "Boeing" was changed to "Boeing Renton".
- The text was "cleaned up," with consistent font and paragraph formatting for section headings and body text.
- The front page was formatted to Agency standard.
- The dating nomenclature for requirements has been streamlined.

3.3 PSD Permits

Prevention of Significant Deterioration (PSD) permits are issued by the Washington Department of Ecology for projects at large facilities that may significantly increase air pollutant emissions of criteria pollutants. The PSD application process requires the applicant to conduct engineering evaluations and computer modeling to demonstrate the proposed project will meet air quality standards and will not cause any significant deterioration to air quality, particularly in designated Class I Areas, such as National Parks and Wilderness Areas. Table 2 summarizes PSD permits issued to Boeing Renton. This permit incorporates PSD-08-01, Amendment 3, PSD-12-01, Amendment 1, and PSD-11-02 which were all issued since the original AOP was issued.

Table 2. PSD permits issued to Boeing Renton

Ecology Permit #	Date Issued	Notes
PSD-08-01 Amendment 3	4/26/16	Reconfiguration and refurbishment of paint hangar P1 in Bldg. 5-50 with VOC limit of 40.8 tpy. Installation of new assembly tooling and support equipment in Bldgs. 4-20, 4-21, 4-81, and 4-82 with VOC limit of 118 tpy. Superseded PSD-08-01, Amendment 2.
PSD-12-01 Amendment 1	1/21/15	PSD amendment based on selection of Phase 2 operation. Superseded PSD-12-01.
PSD-12-01	2/19/13	Phase 1: Moving wing systems from Bldg. 4-81 and 4-82 into Bldg. 4-20 and 4-21 to increase production capacity and overall production for 737 MAX model airplane. Phase 2: Make further changes to increase overall 737 production capacity. Project would result in a net emission increase of 355.2 tons of VOC per year.
PSD-08-01 Amendment 2	2/19/13	Removal of 118 tpy VOC limit for Bldgs. 4-20, 4-21, 4-81, and 4-82 and replacement with VOC limits in PSD-12-01. Superseded PSD-08-01 Amendment 1.
PSD-11-02	10/14/11	Four new replacement wing panel booths in Bldg. 4-20 with a VOC limit of 8.3 tpy, and one new and one modified wing paint booth in Bldg. 4-86 with a VOC limit of 23.7 tpy.

Ecology Permit #	Date Issued	Notes
		These changes accommodated a 737 production increase from 374 to 504 airplanes per year.
PSD-08-01	10/7/08	Reconfiguration and refurbishment of paint hangar P1 with VOC limit of 40.8 tpy.
PSD-97-02	1/14/98	Modifications to Bldg. 4-86 for increased production of wings for 737 Classic, 737 NG, and 757 airplanes, to move airplane production capacity from 32 to 41 airplanes per month, with VOC from Bldg. 4-86 limited to 242 tpy.
PSD-88-4, Amendment 1	5/17/95	Modifications to the Bldg. 4-41 Paint Hangar to accommodate painting and cleaning of 707s, 737s, and 757s, with no increase in VOC limit of 124 tpy. Superseded PSD-88-4.
PSD-88-4	1/30/89	Modifications to the Bldg. 4-41 Paint Hangar and VOC limit of 124 tpy.

3.4 Notice of Construction Order of Approval

A Notice of Construction Order of Approval (OA) 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 OAs issued since the original Boeing Renton operating permit was issued on February 2, 2004.

Table 3. NOC permits issued to Boeing Renton since February 2, 2004

OA	Date Issued	Notes
11304	2/16/17	Revise project description in the NOC to delete obsolete regulatory reference. Cancels and supersedes NOC 7565.
11142	5/26/16	Installation of two spray booths rated at 84,000 cubic feet per minute (cfm) used to apply corrosion-inhibiting compound (CIC) and topcoat to aerospace components. The booth exhausts are equipped with dry filtration systems. These booths are part of the 737 MAX project.
10517	9/25/12	Installation a new In-spar wing paint booth in Bldg. 4-86. Equipped with HEPA exhaust filters. Booth is one of 5 evaluated under PSD-11-02.
10397	11/2/11	Replacement of four wing panel spray booths in Bldg. 4-20 with four new wing panel spray booths. Booths evaluated under PSD-11-02.
10258	12/30/10	Boeing requested reorganization of paint booths PB0001-PB0009 into two separate NOCs. The spray booths were originally permitted under NOCs 3121 and 3714. NOC 10250 authorizes operation of booths (PB0001-PB0006) that includes some spray coating of coatings that contain chromium. NOC 10258 authorizes use of the rudder booths (PB0007-PB0009)
10250	12/30/10	

OA	Date Issued	Notes
		where no chromium containing coatings are spray applied. NOCs 3121 and 3714 were cancelled and superseded by NOCs 10250 and 10258.
7355	6/10/09	Changes were made to the NOC description and Condition 6 for follow-up to the work done for the 5-50 paint hangar project (see NOC 9897). Emissions increased due to debottlenecking. The emission increases were modeled as part of the 5-50 paint hangar project. Exhaust filters with higher removal efficiency were required to demonstrate compliance with the Acceptable Source Impact Level (ASIL) for hexavalent chromium in WAC 173-460-150. This NOC is now obsolete.
7296	6/10/09	Changes were made to the NOC description and Condition 7 for follow-up to the work done for the 5-50 paint hangar project (see NOC 9897). Emissions increased due to debottlenecking. These debottlenecked increases were modeled as part of the 5-50 paint hangar project. Exhaust filters with higher removal efficiency were required to demonstrate compliance with the Acceptable Source Impact Level (ASIL) for hexavalent chromium in WAC 173-460-150. This NOC is now obsolete.
5979	6/10/09	Changes were made to the NOC description and Condition 3 in follow-up to the work done for the 5-50 paint hangar project (see NOC 9897). Emissions increased due to debottlenecking. These debottlenecked increases were modeled as part of the 5-50 paint hangar project. Exhaust filters with higher removal efficiency were required to demonstrate compliance with the Acceptable Source Impact Level (ASIL) for hexavalent chromium in WAC 173-460-150. This NOC is now obsolete.
9897	5/7/09	This is a modification to the existing 5-50 paint hangar originally permitted under NOC 3162. The paint hangar needed to be re-designed to better accommodate the “next generation” 737 aircraft and allow Boeing to increase its aircraft production rate by up to 144 planes per year. NOC 9897 cancels and supersedes NOC 3162.
9068	12/10/04	64 MMBtu/hr natural gas fired boiler with low-NOx burners and flue gas recirculation.
9084	11/18/04	Caterpillar Model 3456 diesel fired emergency stationary generator rated at 764 hp.

Changes made for AOP Renewal: PSD permits and Orders of Approval that have been issued since the last permit revision were added to the AOP. Orders of Approval that have been cancelled and superseded or are obsolete have been removed from the permit.

4 Compliance History

Boeing Renton has been inspected at least annually by PSCAA since 1986. The compliance history for Boeing Renton since February 2004 is summarized below. Notices of Violation (NOVs) and Written Warnings (WWs) issued to the facility are listed in chronological order.

Table 4 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
WW 2-007345	March 13, 2007	May 23, 2007	Yes	AOP 13125, V.Q.3(b(2) Semi-Annual Certification Requirements & 40 CFR 63.753(b)(1)(ii) (9/1/98) Reporting Requirements: Cleaning Operations	Failed to promptly notify the Agency of a new, ANESHAP compliant, hand-wipe cleaning solvent (Skykleen 1000) used in the facility since March 2006.
WW 2-008076	November 8, 2007	March 14, 2008	Yes	AOP 13125, EU 3.125 (OA No. 7355, Condition No. 4) – Pressure drop range	Failed to record pressure drop for the exhaust filters of spray booth PB0085.
WW 2-008078	January 18, 2008	March 28, 2008	Yes	AOP 13125, EU 3.125 (OA No. 7355, Condition No. 4) – Pressure drop range	Failed to record pressure drop for the exhaust filters of spray booth PB0086.
WW 2-008095	June 26, 2008	October 9, 2008	Yes	AOP 13125, EU 3.125 (OA No. 7355, Condition No. 4) – Pressure drop range	Failed to record pressure drop for the exhaust filters of spray booth PB0085.
WW 2-008368	March 1, 2, 16, & 31, 2009	August 7, 2009	Yes	AOP 13125, EU 3.121 (OA No. 7296, Condition No. 4). Spray booth out of compliance. AOP 13125, EU 3.125 (OA No. 7355, Condition No. 4). Spray booth out of compliance.	As reported in the August 2009 AOP Deviation Report, spray booth pressure drop standards were out of compliance with conditions in the AOP.
WW 2-008765	January 24, 2013	January 24, 2013	Yes	EU 3.33 (40 CFR 63.744(a)(1) Place cleaning solvent –laden cloth, paper, or other absorbent applicators in closed containers upon completion of use.	In booth (SB-1) in the 4-20 building, Agency inspector McAfee found an open bag (> gallon size) on a worker lift with solvent (MPK) laden gauze rags in the seal. No worker was present.
NOV 3-006758	May 8, 2013	December 4, 2013	Yes	Failure to comply with PSD-12-01 Condition IX.B Must notify Ecology and PSCAA in writing or electronic mail within 30 days of when construction is commenced.	Construction was commenced 3/26/13 and PSCAA received notice 5/8/13.

WW or NOV #[1]	Violation Date	Issue Date	Closed by Agency?	Applicable Reg. or permit[3]	Comments
NOV 3-007795	June 16, 2014	March 31, 2016	Yes	Failure to meet PSD-11-02 Condition VII.C. Source must report by June 15 for previous calendar year the monthly and rolling 12 month total quantities of VOC-containing materials used and quantity of VOC in four new 737 wing panel booths in Bldg 4-20.	Report was submitted on 6/26/14 for calendar year 2013. Due on 6/15/14.
WW 2-008285	January 2, 2017	January 25, 2017	Yes	Failure to submit test report within 60 days.	Test date was 11/2/16. Report due 1/1/17. Agency received 1/3/17 with revision on 1/6/17.

Notes: [1] Written warnings are numbered with a 2- prefix; Notices of Violation have a 3- or a 4- prefix.
[2] Corrective actions were satisfactorily completed by Boeing Renton
[3] Requirement number (EU No.) was current as of time of NOV or WW issuance, but may have been changed in subsequent permits.

5 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 Renton 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).

5.1 Applicable Requirements

Boeing Renton is subject to all the requirements listed in all the tables contained in Section I of the permit.

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

Section I.A.1 contains PSCAA and 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.

The requirement number in the first column and the requirement paraphrase in the third column are for information only and are not enforceable. 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. For more information regarding any of the requirements cited in the second column, refer to the actual requirements cited.

The actual enforceable requirement and adoption or effective date(s) are in the second column. In some cases, the effective dates of the "Federally Enforceable" requirement and the "*State only*" requirement are different because either the state (or local authority) has not submitted the regulation to the Environmental Protection Agency (EPA) for approval into the State Implementation Plan (SIP), or the state (or local authority) has submitted it and the EPA has not

yet approved it. "*State only*" adoption dates are in italicized font, and shall be understood to include the Washington Department of Ecology and PSCAA. When the EPA does approve the new requirement into the SIP, the old requirement will be replaced and superseded by the new requirement. This replacement will take place automatically, with no changes being made to the permit until the permit is renewed. The new requirement will be enforceable by the EPA as well as PSCAA from the date that it is adopted into the SIP, and the old requirement will no longer be an applicable requirement.

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. In some cases where the applicable requirement does not cite a test method, one has been added. This is called "gapfilling" and is authorized under WAC 173-401-615. Unless otherwise specified in the rules or permit condition, the averaging period for the test method is specified in Section VIII.A. PSCAA Regulation I, Section 3.07(a) states that testing for compliance must follow the current EPA approved methods unless specific methods have been adopted by the PSCAA Board. WAC 173-400-105(4) allows either EPA 40 CFR 60 Appendix A or procedures in Ecology's *"Source Test Manual – Procedures for Compliance Testing" as of July 12, 1990.* These three requirements may conflict if the current method is not listed in the permit. However, EPA seldom significantly changes the Reference Methods and the current method could be used as credible evidence of an emission violation. Finally, major changes in the Reference Test Method may necessitate reopening the permit.

5.2.1 Requirement I.A.1.1 (Opacity)

Both PSCAA Regulation I, Section 9.03 and WAC 173-400-040(1)(a) and (b) state it is unlawful to cause or allow the emission of any air contaminant of any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour which is in excess of 20% opacity (any emission unit). The 9/20/93 version of the WAC is included in the permit since that is the version included in the PSCAA SIP. The 4/1/11 version of the WAC is not included in the permit since WAC 173-400-020(1) states the provisions in WAC 173-400 shall apply statewide except where a local authority (in this case, PSCAA) has adopted and implemented corresponding local rules that apply only to sources in the local jurisdiction. Once EPA deletes the 9/20/93 version of the WAC from the PSCAA SIP, only Regulation I, Section 9.03 will apply in Requirement I.A.1.1.

The monitoring method has not been significantly revised from monitoring requirements in the existing operating permit. Clarification on the monitoring for this standard and provisions as they relate to emergency generators is provided below:

- If Ecology Method 9A demonstrates compliance, additional monitoring is not necessary to demonstrate compliance with the opacity requirements until the next required monitoring.
- Because emergency generators and generators for fire suppression pumps often have visible emissions, but seldom have visible emissions greater than 20% opacity, the permit has specific provisions for those units. If Boeing Renton observes visible emissions from an emergency generator or generator for fire suppression pumps, Boeing Renton 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 WDOE

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 Renton to either determine the opacity during that test or some other test within 30 days. It is not the agency's intention that Boeing Renton would have to startup a generator, solely for the purpose of determining opacity.

- The general opacity limits are "technology-based emission limitations" as they relate to emergency generators. Therefore, Boeing Renton could argue the emergency provisions of WAC 173-401-645 as an affirmative defense for an opacity violation provided that the violation was not caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

5.2.2 Requirement I.A.1.2 through I.A.1.5 (Particulate Matter)

PSCAA Regulation I, Section 9.09, WAC 173-400-060 and WAC 173-400-040(1) and (3) set emission limits on particulate emissions. The 3/22/91 version of WAC is included in the permit since that is the version included in the PSCAA SIP. The current version of the WAC is not included in the permit since WAC 173-400-020(1) states the provisions in this chapter shall apply statewide except where a local authority (in this case, PSCAA) has adopted and implemented corresponding local rules that apply only to sources in the local jurisdiction. Once EPA deletes the 3/22/91version of the WAC from the PSCAA SIP, only Regulation I, Section 9.09 will apply.

5.2.3 Requirement I.A.1.6 (SO2)

The monitoring method has not been significantly revised from monitoring requirements in the existing operating permit. Both PSCAA Regulation I, Section 9.07 and WAC 173-400-040(6) are equivalent requirements (SO_2 emissions not to exceed 1,000 ppmv), except for the second paragraph of the WAC, which is not in the PSCAA regulation. The second paragraph of WAC 173-400-040(6), which is not federally enforceable, allows for exceptions to this requirement if the source can demonstrate that there is no feasible method of reducing the SO_2 concentrations to 1,000 ppm. Since the PSCAA rules are more stringent, this exception is not available to Boeing Renton and the second paragraph does not apply to Boeing Renton.

The 9/20/93 version of WAC is included in the permit since that is the version included in the PSCAA SIP. The 4/1/11 version of the WAC is not included in the permit since WAC 173-400-020(1) states the provisions in this chapter shall apply statewide except where a local authority (in this case, PSCAA) has adopted and implemented corresponding local rules that apply only to sources in the local jurisdiction. Once EPA deletes the 9/20/93 version of the WAC from the PSCAA SIP, only Regulation I, Section 9.07 will apply.

The monitoring method has not been significantly revised from monitoring requirements in the existing operating permit. The basis for this monitoring was described in the Statement of Basis issued with the 2004 operating permit.

5.2.4 Requirement I.A.1.7 (Nuisance)

PSCAA Regulation I, Section 9.11(a) and WAC 173-400-040(5) are similar requirements that address emissions that may be environmentally detrimental or cause a nuisance. The 9/20/93 version of WAC is included in the permit since that is the version included in the PSCAA SIP. The 4/1/11 version of the WAC is not included in the permit since WAC 173-400-020(1) states the provisions in this chapter shall apply statewide except where a local authority (in this case,

PSCAA) has adopted and implemented corresponding local rules that apply only to sources in the local jurisdiction. Once EPA deletes the 9/20/93 version of the WAC from the PSCAA SIP, only Regulation I, Section 9.11(a) will apply.

The monitoring method has not been significantly revised from monitoring requirements in the existing operating permit.

5.2.5 Requirements I.A.1.8 and I.A.1.9 (Fugitive Dust)

PSCAA Regulation I, Section 9.15 and WAC 173-400-040(3) and (8) are similar requirements that address emissions of fugitive dust. The 9/20/93 version of WAC is included in the permit since that is the version included in the PSCAA SIP. The 4/1/11 version of the WAC is not included in the permit since WAC 173-400-020(1) states the provisions in this chapter shall apply statewide except where a local authority (in this case, PSCAA) has adopted and implemented corresponding local rules that apply only to sources in the local jurisdiction. Once EPA deletes the 9/20/93 version of the WAC from the PSCAA SIP, only Regulation I, Section 9.15 will apply.

The monitoring method has not been significantly revised from monitoring requirements in the existing operating permit.

5.2.6 Requirement I.A.1.10 (Maintain Equipment in Good Working Order)

PSCAA Regulation I, Section 9.20(b) requires Boeing Renton to maintain equipment or control equipment not subject to Section 9.20(a) in good working order. (Section 9.20(a) applies to sources that received a Notice of Construction OA under PSCAA Regulation I, Article 6. Since it applies to specific emission units, Section 9.20(a) requirements are included in Section I.B of the permit.) In the existing permit, monitoring was based on the minimum monitoring criteria for maintaining equipment in good working order. This monitoring method has been revised to refer to facility-wide monitoring and the facility Operation & Maintenance Plan requirements. The facility-wide inspections provide monitoring of the general effectiveness of Boeing Renton's Operation and Maintenance (O&M Plan). This general monitoring and compliance with the O&M Plan provides sufficient monitoring criteria to certify that the equipment has been maintained in good working order. However, PSCAA reserves the right to evaluate the maintenance of each piece of equipment to determine if it has been maintained in good working order.

5.2.7 Requirement I.A.1.11 (O&M Plan)

In accordance with PSCAA Regulation I, Section 7.09(b), Boeing Renton 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 a Washington Department of 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.

PSCAA Regulation I, Section 7.09(b) also requires Boeing Renton to promptly correct any defective equipment. However, the underlying requirement in most instances does not define "promptly"; hence for significant emission units and applicable requirements that Boeing Renton has a reasonable possibility of violating or that a violation would cause an air quality problem, PSCAA added clarification that "promptly" usually means within 24 hours. For many insignificant emission units and equipment not listed in the permit, "promptly" cannot be defined because the emission sources and suitable pollution control techniques vary widely, depending on the contaminant sources and the pollution control technology employed. However, the permit identifies a means by which to identify if Boeing Renton is following good industrial practice.

As described in Section V.Q, Boeing Renton must report to PSCAA any instances where it failed to promptly repair any defective equipment, both equipment that received approval from the Agency and that which did not. In addition, Boeing Renton has the right to claim certain problems were a result of an emergency (Section V.R) or unavoidable (Section V.S).

Following these requirements demonstrates that Boeing Renton has properly implemented the O&M Plan, but it does not prohibit PSCAA or EPA from taking any necessary enforcement action to address violations of the underlying applicable requirements after proper investigation. However, not following its own O&M Plan is an indication that Boeing Renton was not using good industrial practice.

5.2.8 Requirement I.A.1.12 (Deposition of Particulate Matter Beyond Property Line)

WAC 173-400-040(3) prohibits the emission of particulate matter from the facility to be deposited beyond the property line in sufficient quantity as to unreasonably interfere with the use and enjoyment of the property upon which the material is deposited. This is not a federally enforceable requirement. The monitoring method is based on responding to complaints and general inspections of the facility to identify any particulate emissions or deposition of particulate that may unreasonably interfere with the use and enjoyment of property. Receiving complaints does not necessarily mean Boeing Renton is in violation of this requirement, but triggers action by the source to prevent a violation.

In comments submitted during the public comment period, Boeing Renton requested that this requirement be removed as inapplicable. They suggested that this requirement is duplicative of PSCAA Regulation I, Section 9.11 and therefore should be displaced in accordance with WAC 173-400-020(1). The Agency does not concur that these are equivalent regulations, and therefore, both are included in the permit as applicable requirements.

5.2.9 Requirement I.A.1.13 (HCl)

PSCAA Regulation I, Section 9.10 specifies that hydrochloric acid (HCl) emissions shall not exceed 100 ppm (dry) corrected to 7% O_2 for combustion sources. This is not a federally enforceable requirement. Since Boeing Renton burns only pipeline grade natural gas, distillate fuel oil, and Jet A and the other processes do not use chlorine in a form likely to emit HCl, it is incapable of violating this standard while complying with the other requirements in the permit. Therefore, the permit does not contain additional monitoring requirements.

5.2.10 RCW 70.94.040

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.

5.3 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. The affected facilities covered by these Subparts are subject to the enforceable requirements listed in column 2 (for example, Subparts Dc or IIII). These Subparts are identified in the fourth column of the table. Section I.A.3 (US EPA NESHAP General Provisions).

5.4 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 National Emission Standards for Hazardous Air Pollutants (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. For most of these requirements, the permit identifies which 40 CFR 60 Subparts this includes (for example, Subparts DD, GG, DDDDD, GGGGG). These are identified in the fourth column of the table.

5.5 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. The PSCAA did not repeat the facility-wide requirements listed in Section I.A in Section I.B unless the monitoring method was specific to the listed emission unit. If a requirement in Section I.A. is repeated in Section I.B, then the monitoring, maintenance, and recordkeeping method specified in that section supersedes the monitoring, maintenance, and recordkeeping method specified in Section I.A.

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 Renton 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. Following the description are the actual applicable requirement or compliance requirements.

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: Several emission units listed in the existing permit have been removed during the renewal process since these operations no longer take place at the facility. This includes the Halogenated Solvent Vapor Degreasing and Cold Solvent Operations unit previously identified as Emission Unit 1, Chemical Tankline Processing Operations previously identified as Emission Unit 2, and Composite Processing Operations previously identified as Emission Unit 8.

5.5.1 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.

This table does not necessarily include all activities and equipment that may be subject to the requirements of this section; activities and equipment that have not received an OA or were not previously registered with PSCAA may not be included in the table. The last column in the table indicates whether Aerospace NESHAP (ANESHAP)-regulated coatings containing inorganic Hazardous Air Pollutants (HAPs) may be sprayed at the equipment at the time of permit issuance. However, any of the activities and equipment listed below might have such coatings sprayed in them in the future, and in some cases a modification to the activities and equipment and/or an amendment or modification to the existing OA might be required.

5.5.1.1 ANESHAP

Boeing Renton 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).
- At the time of permit issuance, the Boeing Renton facility depaints six completed aircraft or less each calendar year. However, under the Alternate Operating Scenario, the Boeing Renton facility could depaint more than six completed aircraft in a calendar year and thus be subject to the depainting requirements (required monitoring in Section II).

Although chemical milling maskant application is regulated in the ANESHAP, Boeing Renton does not conduct chemical milling maskant application so it is not included in the list of general activities and the standards specific to chemical milling maskant application are not included in the permit. However, 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.1.63 (waste handling) since this language will be consistent for all Boeing facilities. It is not intended to imply that Boeing Renton is permitted to conduct chemical milling maskant application operations without complying with the requirements in the NESHAP.

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. This is considered an existing operation at Boeing Renton so new requirements do not apply until December 11, 2018.
- 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 Renton to prepare and implement a startup, shutdown and malfunction plan for spray booths since this requirement has been removed from the NESHAP.
- 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 NESHAP.
- Updated language pertaining to HAP-containing wastes to be consistent with revised NESHAP. (Note that the compliance date for these requirements is December 11, 2018, per 51114 Federal Register / Vol. 81, No. 149 / Wednesday, August 3, 2016).

EPA ANESHAP Determinations: The Agency specified in Requirement I.B.1.42 that Preval hand-held aerosol cans with a non-refillable pressurized portion quality 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 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.

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

- PSCAA Regulation I, Section 9.16 has been updated. Both the 7/12/01 and 10/28/10 versions of the regulation are included in the permit since the 7/12/01 version of the rule is the version in the SIP. Aerospace coating operations subject to the ANESHAP are exempt from the provisions of Regulation I, Section 9.16(c), (d) and (e). Boeing Renton does not conduct mobile spray-coating operations under Section 9.16(e).
- In updating the list of activities and equipment that received an OA or were registered with PSCAA, only two booths are now identified as being registered without an NOC OA. These booths were installed prior to 1987, and PSCAA approved the booths by registration instead of by an NOC OA. These booths are not subject to the standard OA conditions or the state-only requirement in RCW 70.94.152(7). However, they are subject to all applicable PSCAA regulations. Booths identified without an Order of Approval (OA) under PSD 12-01 have not been authorized under the NOC OA program, but will need to be prior to commencing construction.
- Added new Orders or Approval and applicable conditions.

Requirements Included in Original AOP: PSCAA Regulation II, Section 3:09(b) specifies the VOC content for some aerospace primers and topcoats. The monitoring requirement specifies that Boeing Renton maintain manufacturer's information demonstrating compliance with these requirements and initiate appropriate corrective action if a noncompliant situation is observed. PSCAA Regulation II, Section 3.09 also specifies work practice standards including acceptable application methods, cleanup, and storage of VOC-containing material. The ANESHAP has similar requirements; however, it does not require any periodic monitoring of those housekeeping requirements. After considering the compliance history of Boeing Renton for this type of housekeeping requirement, PSCAA has determined that periodic, quarterly, work practice inspections by Boeing Renton are sufficient to assure and monitoring continued compliance.

Boeing Renton requested that aerosol temporary coatings Ardox 327N and Aztec AZ643 GC Aerosol be exempt from PSCAA Regulation II, Section 3.09 and cited a May 25, 1995 letter from the Washington State Department of Ecology (Ecology) as justification. The letter says that WAC 173-490-208, a similar requirement, does not apply. The letter, however, says that Boeing Renton must comply with PSCAA regulations and specifically cites Section 3.09. Therefore, PSCAA has not granted an exemption from the requirements of PSCAA Regulation II, Section 3.09 for aerosol temporary coatings Ardox 327N and Aztec AZ643 GC Aerosol.

Besides coating aerospace parts in spray booths, Boeing Renton sometimes coats parts for motor vehicles and mobile equipment. When Boeing Renton 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 Renton 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.

5.5.1.2 PSD Requirements

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

- Revised terms and conditions related to PSD permits to accurately reflect the current version of the PSD permits that apply to Boeing Renton.
- Added terms and conditions from PSD permits issued since 2004.

5.5.1.3 Obsolete requirements

PSD 97-02 (1/14/98) included a condition which stated that the approval for the project becomes void if Boeing Renton did not commence construction within 18 months. This 18 month period has passed. This condition (No. 6 in PSD 97-02) is obsolete and is not included in the Air Operating Permit.

PSD 88-4 Amendment 1 (5/17/95) includes a condition which states that the approval for the project became void if Boeing Renton did not commence construction within 18 months. This 18 month period has passed. This condition (No. 5 in PSD 88-4 Amendment 1) is obsolete and is not included in the Air Operating Permit.

OA 3142 Condition No. 4 (1/23/89) requires that Boeing Renton submit paint spray gun cleaning system design and schedule for approval before commencing operations in the 4-41 building. Operations have commenced at this building and this OA condition is obsolete.

Order of Approval No. 8703 (3/9/00) states: “Boeing Renton shall comply with the requirements of the draft Boeing Renton Title V Air Operating Permit as proposed on the date this OA is signed, to be superseded by the final Boeing Renton Title V Air Operating Permit when the permit is issued.” This condition of OA No. 8703 became obsolete upon adoption of the OA into the Boeing Renton AOP. This requirement has therefore not been repeated in the Boeing Renton AOP.

PSD-11-02 (10/14/11) Condition III states that the PSD Approval will become invalid if construction is not commenced within, or is discontinued for a period of 18 months or more, or is not completed within a reasonable period of time. This 18 month period has passed and booths have been constructed so this condition is obsolete. Condition IX.A sets forth deviation reporting requirements to be used prior to incorporation of the PSD permit into the AOP which becomes obsolete one the AOP is issued.

Several Orders of Approval have become obsolete since the equipment has been removed from the facility or the Order has been cancelled and superseded by another Order. Conditions in these Orders have not been included in the operating permit.

5.5.2 External Combustion

This section includes all boilers and heaters that have specific applicable requirements other than the facility-wide applicable requirements in Section I.A.

BOIL01, BOIL02, BOIL03 and BOIL06 were installed before Notice of Construction Orders of Approval were required (1963 and 1966).

Since the fuel is limited to natural gas with oil back-up the incinerator requirements in WAC 173-400-050(2) do not apply.

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

Boeing Renton presently has six boilers and two process air heaters that are subject to Subpart DDDDD of 40 CFR 63. In the renewal permit, this equipment is consolidated into Section I.B.2, External Combustion).

Each of the boilers and heaters listed are “Units designed to burn gas 1” under 40 CFR Part 63, Subpart DDDDD. All boilers except BOIL04 are gas-fired with distillate oil backup fuel. BOIL04 is gas-fired with no 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. They are still required to have tune-ups every 5 years. The one-time energy assessment was required by January 31, 2016. Boeing Renton has conducted the one-time energy assessment, so this is not an ongoing requirement. However, Boeing Renton is required to maintain a record of the energy assessment in Section II.B.2.b.ii.

5.5.2.2 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. BOIL04 at Boeing Renton is 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.

BOIL01, BOIL02, BOIL03, BOIL05, and BOIL06 are not subject to the NSPS in 40 CFR 60 Subpart Dc (10 - 100 million Btu/hour) or 40 CFR 60 Subpart Db (>100 million Btu/hour). These boilers were all installed in 1966 or earlier and have not been modified or reconstructed (as defined in 40 CFR Part 60 Subpart A) after the relevant applicability dates.

5.5.2.3 Local Regulations

Both Regulation I, Section 9.03 and WAC 173-400-040(1)(a) and (b) opacity standards apply. The 9/20/93 version of the WAC is included in the permit since that is the version included in the PSCAA SIP. The 4/1/11 version of the WAC is not included in the permit since WAC 173-400-020(1) states the provisions in this chapter shall apply statewide except where a local authority (in this case, PSCAA) has adopted and implemented corresponding local rules that apply only to sources in the local jurisdiction. Once EPA deletes the 9/20/93 version of the WAC from the PSCAA SIP, only Regulation I, Section 9.03 will apply in Requirement I.B.2.14. The fuel burning equipment at Boeing Renton can only burn natural gas as the primary fuel and very low sulfur distillate oil or residual oil as back up fuel. The monitoring method has not been significantly revised from monitoring requirements in the existing operating permit.

Regulation I, Section 9.08(a) and Revised Code of Washington, RCW Section 70.94.610 (1991) fuel standards apply to these units. Generally, any “new” or non-used distillate or very low sulfur

oil does not contain any of the listed trace elements at concentrations even approaching the standards in the regulation. Therefore, it has been determined that Boeing Renton can adequately demonstrate compliance with these requirements by filling its oil tanks with and burning only oil that is "new" and is either "very low sulfur" or "distillate" fuel oil.

5.5.2.4 OA Conditions

Boiler BOIL04 was approved in 2004 under OA 9068. This OA will be superseded and replaced by OA 10410 at time of operating permit issuance. The updated Order removes the requirement for annual source testing of NOx and CO using EPA Methods 7E and 10. This requirement was based on an old version of the boiler NESHAP. The current version of the boiler NESHAP does not require annual testing, but it does require routine tune-ups. Boeing is required under the revised Order to service the boiler at least once per calendar year. After servicing, a portable gas analyzer is used to verify emissions are below permitted limits. The conditions in OA 10410 have been added to the permit and the conditions in OA 9068 have been deleted.

5.5.3 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. Activities and equipment with particulate control devices include abrasive blasting operations on production parts, tooling or equipment, carpentry, machining of metal or nonmetal parts, housecleaning, and wood shredding operations. The monitoring method has not been significantly revised from monitoring requirements in the existing operating permit.

The 9/20/93 version of WAC is included in the permit since that is the version included in the PSCAA SIP. The 4/1/11 version of the WAC is not included in the permit since WAC 173-400-020(1) states the provisions in this chapter shall apply statewide except where a local authority (in this case, PSCAA) has adopted and implemented corresponding local rules that apply only to sources in the local jurisdiction. Once EPA deletes the 9/20/93version of the WAC from the PSCAA SIP, only the PSCAA regulations will apply.

Obsolete Requirements: Orders of Approval 5847, 5974 and 7614 are obsolete since the equipment is no longer operating at Boeing Renton.

5.5.4 Stationary Internal Combustion Engines

This section includes all stationary reciprocating internal combustion engines (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.

Changes made for AOP Renewal: The permit has been updated to reflect the following:

- Revisions to the NESHAP for Stationary RICE in 40 CFR Part 63, Subpart ZZZZ. The NESHAP applies to existing, new, and reconstructed stationary RICE. The regulatory language in the permit is based on the January 30, 2013 regulatory language. However, 40 CFR 63.6640(f)(2)(ii)&(iii) (1/30/13) have been vacated per *Delaware v. EPA* 785 F.3d 1 (D.C. Cir 2015). An emergency stationary RICE may not be operated for the purposes specified in 40 CFR 63.6640(f)(2)(ii)&(iii) (1/30/13) unless it meets the applicable requirements for a non-emergency engine. The permit language reflects this

vacature. The equipment table specifies whether the engine is an existing or new engine. All engines are emergency engines as defined in the NESHAP.

- The requirements in the NSPS for Stationary Compression Ignition Internal Combustion Engines in 40 CFR Part 60, Subpart IIII have been added since these apply to some engines at Boeing Renton. The NSPS applies to engines at Boeing Renton manufactured after April 1, 2006 (July 1, 2006 for fire pump engines) or modified after July 11, 2005. The regulatory language in the permit is based on the January 30, 2013 regulatory language. However, 40 CFR 60.4211(f)(2)(ii)&(iii**)** (1/30/13) have been vacated per *Delaware v. EPA* 785 F.3d 1 (D.C. Cir 2015). An emergency stationary RICE may not be operated for the purposes specified in 40 CFR 60.4211(f)(2)(ii)&(iii) (1/30/13) unless it meets the applicable requirements for a non-emergency engine. The permit language reflects this vacature. The equipment table specifies NSPS applicability.
- The requirements associated with OA No. 9487 have been deleted since this emergency generator is no longer at the facility. This Order is obsolete.

5.5.5 Motor Vehicle Fueling Operations

This section consists of all activities and equipment associated with motor vehicle fueling operations, including fuel receiving, fuel storage, fuel dispensing, and material and waste handling. There are two gasoline stations located at Boeing Renton. Gasoline throughput at the stations is less than 600,000 gallons annually. Boeing Renton is required to comply with both the SIP approved version of Reg. II Section 2.07, which is federally enforceable, and the "S*tate Only"* version of the regulation.

Stage 1 requirements apply to the two underground storage tank, but the Stage 2 requirements in Regulation 2, Section 2.07 do not apply since the stations were installed in 1989 and the facility throughput is below 600,000 gallons annually. Stage 2 requirements are not included in the permit. If the throughput increases above 600,000 gallons per year, Stage 2 requirements would apply.

Even though there is no PSCAA requirement to do so, Boeing Renton has chosen to install Stage 2 vapor recovery equipment. This equipment is deemed to be "emission control" equipment, and was required to be permitted under an OA. OA No 6061 was issued for the Stage 2 vapor recovery equipment in 1995. The minimum inspection frequency is monthly. Section 2.07(a)(1) states the provisions of this rule do not apply to any Stage 1 or Stage 2 vapor recovery system that is not required by the rule.

Inspections of the Stage 1 system are required after each product delivery. These inspections can occur any time after a product delivery as long as it occurs before the next delivery. Any equipment found to be defective must be repaired or replaced as soon as possible, but no later than 7 days after the inspection. Boeing Renton does not have to report finding defective equipment as a permit deviation as long as Boeing Renton takes the appropriate corrective action. However, failure to take corrective action as described in the permit must be reported under Section V.M Compliance certifications or Section V.Q Reporting of the permit. Boeing Renton must also, under Regulation I, Section 7.09(b), keep a record of all inspections and actions required by it O&M Plan.

5.5.6 Storage Tanks

This section consists of all activities and equipment associated with storage tank operations (except for gasoline storage) listed below that have been permitted under an OA and/or have specific applicable requirements other than the general requirements in Section I.A. This includes 6 storage tanks.

Changes made for AOP Renewal: The requirements of NSPS in 40 CFR Part 60, Subpart Kb have been removed from the permit. Boeing Renton used to be required to maintain records showing dimensions of the storage vessels and an analysis showing the capacity. This requirement has been removed from the NSPS. All storage tanks are below the applicability criteria in 40 CFR 60.110b(a) and (b) based on storage vessel capacity and the maximum true vapor pressure of the liquid in the storage tank. Storage tanks hold diesel fuel and Jet A fuel. These fuels all have a vapor pressure less than 3.5 kPa.

5.5.7 Wood Furniture Operations

This section consists of wood furniture manufacturing activities that have specific applicable requirements other than the general requirements in Section I.A, including activities subject to the requirements 40 CFR Part 63, Subpart JJ - National Emission Standards For Wood Furniture Manufacturing Operations.

Wood furniture manufacturing activities are subject to regulation under 40 CFR 63 Subpart JJ. 40 CFR 63 Subpart JJ regulates wood manufacturing activities even if they are done on a small scale, so long as the activities take place at a facility that is a major source as defined by 40 CFR 63.2. Boeing Renton is a major source under this definition.

40 CFR 63.800(a) offers an exemption from all but the recordkeeping requirement of 40 CFR 63 Subpart JJ for facilities that are considered to be incidental wood furniture manufacturers. Incidental wood furniture manufacturers are facilities that use 100 gallons/month or less of finishing material or adhesives in the manufacture of wood furniture or wood furniture components. Renton meets these criteria. An incidental wood furniture manufacturer meets the provisions of 40 CFR Subpart JJ by keeping purchase or usage records demonstrating that the facility uses 100 gallon/month of finishing materials or adhesives for wood furniture manufacturing.

The definition of incidental wood furniture manufacturer does not clearly state what basis (e.g., 1-month average, annual average, 12-rolling month average, etc.) the monthly finishing materials and adhesives records must be averaged on. However, PSCAA has reviewed the applicability criteria in 40 CFR 63.800, and has interpreted the averaging method as being a 1-month basis. It is the belief of PSCAA that if the NESHAP intended that a basis other than a 1-month basis be used for the definition of an incidental wood furniture manufacturer, the alternate basis would have been specified.

Changes made for AOP Renewal: The requirement paraphrase was updated to more accurately reflect regulatory language and include the 100 gallon per month de minimis level.

5.5.8 Site Remediation

This section consists of site remediation activities, which include processes used to remove, destroy, degrade, transform, immobilize, or otherwise manage remediation material.

Changes made for AOP Renewal: The requirements in 40 CFR Part 63, Subpart GGGGG were evaluated as part of the renewal process. Based on quantity of HAP that is contained in remediation material excavated, extracted, pumped, or other removed during site remediations,

Boeing Renton is only subject to the recordkeeping requirement in 40 CFR 63.7881(c). This has been added to the permit.

Note that there is a pending rulemaking with respect to the Site Remediation NESHAP: 81 Fed. Reg. 29,821 (May 13, 2016).

5.5.9 Waste Water Treatment Operations

This section includes all activities and equipment associated with the industrial waste water treatment operations, including any tank, container, surface impoundment, oil-water separator, organic-water separator, or transfer system used to manage off-site material; chemical and physical treatment methods; waste water storage tanks; sludge drying, material and waste handling; and air emission control equipment that have specific applicable requirements other than the general requirements in Section I.A. This waste water treatment plant (WWTP) may receive off-site waste and is therefore subject to the Off-Site Waste and Recovery Operations NESHAP (40 CFR Part 63 Subpart DD).

Changes made for AOP Renewal: The equipment list was updated to delete the groundwater air stripper permitted under OA 7455 and the process wastewater air stripper permitted under OA 2894 since the equipment has been removed. These Orders are obsolete. Applicable requirements from Subpart DD of 40 CFR 63 have also been added to the permit which allows Boeing Renton to be able to treat wastewater from off-site.

5.5.10 Composite Processing Operations

This section was deleted during the operating permit renewal. The only product that contains the styrene monomer used at Boeing Renton is a putty used in small quantities for touch-up which is not considered a manufacturing operation. 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. Boeing Renton had previously obtained a Notice of Construction permit for non-spray application of styrene resins based on the assumption that Regulation II, Section 3.08 did apply. Based on our determination, this OA 8085 issued on 4/19/00 is obsolete. No other composite processing operations occur at Boeing Renton.

6 Monitoring, Maintenance and Recordkeeping Procedures

Except for the testing required under Section II of the permit, tests performed to satisfy the requirements of any monitoring method under Section II of this permit are monitoring tests and are not considered “compliance tests” for purposes of Section V.N.1(c) of the permit. Hence, Boeing Renton is not required to provide PSCAA with advance notification of most, if any, of its monitoring even if that monitoring is a reference method like Ecology Method 9A. For example, if Boeing Renton observed visible emissions and then performed a Method 9 observation, the results of that observation can be used to demonstrate compliance, even if Boeing Renton did not notify the Agency. Boeing Renton must follow the procedures contained in Section II of the permit, Monitoring, Maintenance and Recordkeeping Procedures. Failure to follow a requirement in Section II may not necessarily be a deviation of the underlying applicable emission standard in Section I. However, not following a requirement of Section II is a deviation of Section II and Boeing Renton 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 Renton 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 monitoring, maintenance and recordkeeping requirements were revised in accordance with the Boeing Renton 2008 renewal application and work with Boeing staff since that time.
- The section has been updated to reflect any new or modified monitoring, recordkeeping and reporting requirements since issuance of the 2004 permit.

6.1 Standard Approval Conditions

A standard PSCAA Notice of Construction Approval 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 usually done with a Notice of Completion. Normally within six months to a year after receiving a Notice of Completion, a PSCAA inspector verifies by inspection that the equipment was installed as specified and in accordance with the Approval Order. While the Notice of Completion is a one-time requirement that Boeing Renton has complied with, Boeing Renton cannot change the approved equipment in such a manner that requires an NOC OA without first obtaining an NOC OA which is addressed in Section IV.A of the permit.

Another standard approval condition on some of the NOC Orders of Approval requires the applicant to development and implement an O&M Plan for the equipment approved in the OA. 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 requirement. This is for information purposes only and no monitoring is required, hence the approval condition is not listed in the permit.

6.2 Monitoring Frequency

In determining the appropriate monitoring frequency, PSCAA considered several factors including the following:

- Boeing Renton's compliance history and the likelihood of violating the applicable requirement;
- The complexity of the emission unit including the variability of emissions over time;
- The likelihood that the monitoring would detect a compliance problem;
- The likely environmental impacts of a deviation;
- Whether add-on controls are necessary for the unit to meet the emission limit;
- Other measures that Boeing Renton may have in place to identify problems;
- The type of monitoring, process, maintenance, or control equipment data already available for the emissions unit;
- The technical and economic considerations associated with the range of possible monitoring methods; and

- The kind of monitoring found on similar emissions units.

6.3 O&M Plan Requirements

Boeing Renton's O&M Plan shall include equipment operation and maintenance procedures specifying how Boeing Renton will assure continuous compliance with PSCAA Regulations I, II and III.

7 Prohibited Activities

Some of the requirements Boeing Renton identified in the operating permit application are included in Section III as prohibited activities. Since these activities are prohibited, routine monitoring of parameters is not appropriate. Instead, PSCAA has listed these activities in this section to highlight that they cannot occur at the facility. 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. Based on comments received during the public comment period, a statement was added specifying compliance with applicable requirements shall be monitored through "Documentation on File" and "Facility Inspections".

8 Activities Requiring Additional Approval

Some of the requirements Boeing Renton 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. Based on comments received during the public comment period, a statement was added specifying compliance with applicable requirements shall be monitored through "Documentation on File" and "Facility Inspections".

8.1 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. Similarly, the Washington State Department of Health is the permitting agency for radionuclides under chapter 246-247 WAC.

PSCAA Regulation I, 6.03(b), notifications and 6.03(c), exemptions, lists sources for which a Notice of Construction application and OA are not required. For notifications, for purposes of

complying with the recordkeeping requirement in Regulation I, 6.03(c) for exemptions, Boeing Renton shall provide in a timely manner, upon request by the Agency, any information reasonably necessary to document the exemption. 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 rate capacity. Similarly, simply observing an emission unit, such as hand held sanding equipment, can fully demonstrate the applicability of an exemption.

8.2 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.

Reg. I: 15.01 defines a “nonroad engine” as any internal combustion engine that, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. An internal combustion engine is not a nonroad engine if:

(1) The engine is used to propel a motor vehicle or a vehicle used solely for competition, or is subject to standards promulgated under section 202 of the Federal Clean Air Act (FCAA); or

(2) The engine is regulated by a NSPS promulgated under section 111 of the Federal Clean Air Act (FCAA); or

(3) The engine remains or will remain at a location for more than twelve consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. This paragraph does not apply to an engine after the engine is removed from the location.

Reg. I: 15.03 requires Boeing Renton to file a Notice of Intent to Operate prior to commencing operation of a nonroad engine(s), except for nonroad engines that are self-propelled or intended to be propelled while performing its function. Reg. I: 15.05(a) requires nonroad engines to use ultra-low sulfur diesel or other relatively clean-burning fuels.

9 Standard Terms and Conditions

Some of the requirements Boeing Renton 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.

9.1 Reporting

Section V.Q of the Operating Air Operating Permit lists the reports that Boeing Renton 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 applications 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 applications 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. Therefore, all application forms, reports and compliance certifications submitted pursuant to this permit as specified in Section V.Q.3. must be certified by a responsible official.

The table in Section V.Q.3 also identifies which reports must be submitted in electronic format in accordance with Regulation I Section 7.09(c). Boeing Renton is required to submit complete copies of all required compliance report in electronic format as an attachment to an e-mail message, in addition to the original written document. The date the document is received by e-mail is considered the submitted date of the report.

10 Unconstrained Activities

Certain activities that occur at Boeing Renton do not lend themselves to be clearly identified as "administrative changes", "off permit changes", "changes not requiring a permit modification", or "minor/major modifications" as defined in WAC 173-401. These activities may be considered

"unconstrained". The term "unconstrained activities" comes from the 1994 preamble to 40 CFR Part 70, which states that 40 CFR Part 70 "is not concerned with changes in those activities that have no bearing on regulated air pollutant emissions. Such activities do not give rise to permit terms, and thus changes to those activities cannot require a revision of permit terms. Examples of such 'unconstrained activities' could include moving process equipment and conducting routine maintenance activities. Changes to activities that only insignificantly affect regulated air emissions are also not at issue here."

The following activities that have occurred at Boeing Renton fit into the unconstrained activities category. These activities are just examples of the types of activities that could be considered unconstrained. The world of unconstrained activities is broad and can include many other activities besides those listed below.

- Moving a spray booth without making changes to the booth itself or to the activities taking place in the booth
- Adding or replacing stackers at one of the paint hangars
- Adding or replacing tools used to hold aircraft parts in place during the manufacturing process
- Adding or replacing small unheated cups or cans of non-chlorinated solvents used for cleaning
- Adding, replacing, or removing equipment used for mechanical cutting, drilling, or machining of metal, wood, composite, or plastic parts
- Adding a portable diesel generators that meet the definition of a "nonroad engine" in Title II of the CAA and in 40 CFR Part 89 that will be on site for 12 months or less

Removing emission units from the Boeing Renton site such as paint booths, boilers, or dust collectors. It should be noted that there is no discussion of unconstrained activities in the air operating permit.

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 Public Comments and Responses

Comments were received from Blake Boling, Boeing Renton, on April 24, 2017. The commenter provided a redline version of the draft Operating Permit and Statement of Basis which included both comments and edits to the document. The commenter also requested additional attachments be added to the Statement of Basis. All comments have been reviewed and responses are provided below:

- Edits on wording and regulatory references were checked for accuracy and updated if appropriate.
- Mailing address was updated (Administrative Amendment 8/2/17)
- Contact information on page 1 was updated.
- Table of Contents was updated.

- There was a request to add the statements "Once EPA deletes the 9/20/93 version of the WAC from the PSCAA SIP, only <*local regulatory citation*> will apply" for several requirements in Section I.A.1. In the introductory language to Section I, the Agency included language that specifies requirements that are currently "state only" enforceable requirements will immediately convert to federally-enforceable requirements upon incorporation into the PSCAA SIP. Additional language was added to specify if the WAC 173-400-040 language is deleted from the PSCAA SIP, only the corresponding local rule will apply. This is consistent with the language in the 12/29/12 version of WAC 173-400-020(1) which 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 commenter has also requested this language be included with specific requirements. The Agency has included this language where applicable.
- The commenter requested that we specify that once EPA deletes the 9/20/93 version of WAC 173-400-040(3) and (8) from the PSCAA SIP, only Reg. I, Section 9.15 will apply. The Agency concurs that the 7/1/16 version of WAC 173-400-040(9)(a) has a corresponding local rule, but the 7/1/16 version of WAC 173-400-040(4) does not have a corresponding local rule since it applies broadly to fugitive emissions. Therefore, the 7/1/16 version of WAC 173-400-040(4) will become federally enforceable upon adoption into the SIP and will replace the 9/20/93 version of WAC 173-400-040(3). (Note: Renumbering of WAC 173-400-040 occurred between these versions.)
- The commenter requested that we remove WAC 173-400-040(3). However, the Agency does not concur that PSCAA Reg. I, Section 9.11 is a corresponding local rule that displaces WAC 173-400-040(3). This rule is not currently in the SIP so it is identified in the permit as a "State Only" requirement.
- The commenter requested that Reg. I, Section 6.11 and Reg. III, Section 2.02 be deleted from the permit. These are applicable requirements that require Boeing Renton to comply with NSPS and NESHAP standards in 40 CFR Parts 60, 61 and 63. However, we concur with the commenter that including this general prohibition from PSCAA regulations implies that the violation of an NSPS or NESHAP not included in the permit would be a violation of the operating permit. If additional NSPS or NESHAP become applicable to the facility with a remaining permit term of three or more years, WAC 173-401-730(1)(a) specifies the permit shall be reopened and revised to incorporate these new requirements into the permit. Until that time, the standard would be directly enforceable under the Agency regulations. However, these regulations do apply for NSPS or NESHAP requirements that are already incorporated into the permit. The citations have been included whenever there is a reference to these federal requirements. The Agency has also added Regulation I, Section 3.25 to the citation.
- The commenter requested we specify that several requirements in the 40 CFR Part 60 and 63 provisions be identified as applicable only to affected facilities/sources at the date of issuance. The table has been updated to include requirements that apply to affected facilities/sources that are subject to specific NSPS or NESHAP requirements in Section I.B of the permit. For other requirements, it did not make sense to limit applicability to sources that were already subject to a NESHAP. These requirements have been deleted or moved to other sections of the permit as summarized below:

- 40 CFR 60.1 which requires Boeing Renton to comply with any new or revised standard of performance that applies has been deleted since including this general prohibition implies that the violation of an NSPS not included in the permit would be a violation of the operating permit. If a new NSPS standard became applicable, the Agency would reopen and revise the operating permit. Until that time, the standard would be directly enforceable through Reg I, Section 6.11.
- 40 CFR 60.7(a)(1), (a)(3) and (a)(4): Required notification of the date of construction (or reconstruction as defined under 40 CFR 60.15), date of initial startup of an affected facility, or date of physical change are included in the table of required submittals under notifications (Section V.Q.3 of the permit).
- 40 CFR 60.12: NSPS concealment provisions have been moved to Section III of the permit which is consistent with the existing operating permit.
- 40 CFR 60.14: NSPS modification requirements are now referenced with New Source Review in Section IV.A since modification of a source would trigger new source review under PSCAA Reg I, Article 6.
- 40 CFR 60.15: NSPS reconstruction requirements are now referenced with New Source Review in Section IV.A since reconstruction of a source would trigger new source review under PSCAA Regulation I, Article 6. The notification requirement is also included in the table of required submittals under notifications (Section V.Q.3 of the permit) since this is a separate applicable requirement. The required notification can be satisfied through submittal of a Notice of Construction application.
- 40 CFR 60.19: Commenter requested this be updated to apply to NSPS affected sources. This change has been made.
- 40 CFR 63.1(a)(4) and (c)(1): Commenter requested that language be clarified to state Boeing Renton must comply with general provisions to the extend they are explicitly identified in the NESHAP standards. This change has been made.
- 40 CFR 63.4(b): Concealment provisions have been moved to Section III of the permit.
- 40 CFR 63.5: Preconstruction review requirements have been incorporated into Section IV.A since modification of a source that would trigger NESHAP requirements would trigger new source review under PSCAA Regulation I, Article 6.
- 40 CFR 63.9(b): Required initial notification requirements are included in the table of required submittals under notifications (Section V.Q.3 of the permit).
- 40 CFR 63.10(b)(3): Inapplicability determinations record retention requirements have been limited to determinations made for affected NESHAPs.

- The commenter requested removal of the requirement in I.B.1.1. These are applicable requirements in the regulation and in PSD permits and have not been removed.
- The commenter requested we update regulatory language in I.B.1.3. I.B.1.16, I.B.1.65, I.B.1.77 to reflect EPA guidance released in the Fall 2016. The document provides guidance only and does not impose legally-binding requirements on the EPA, state

regulators or the regulated industry. We have not updated the regulatory language, but we have added discussion in this document regarding this guidance if it applies to operations at the facility.

- The citation with compliance date for specialty coating applications has been added as enforceable requirement for clarity. In addition, the language in the regulatory paraphrase has been updated to be more consistent with the language in 40 CFR 63.749(a)(3).
- The commenter requested the clarification of "completing their use" in Requirements I.B.1.17, I.B.1.65, I.B.1.87 be updated based on EPA guidance released in the Fall 2016. The guidance is specific to 40 CFR 63.748(a)(2). The Agency believes the language included in the draft permit adequately defines the phrase and the expectation is that if an employee is no longer at the location where the activity occurs, this use would be complete. No change made.
- The commenter requested inclusion of an alternative to 40 CFR 63.744(b)(1) and (2). The Agency has not included this alternative since we would need to reopen to permit to include any approved baseline. Not including does not preclude Boeing Renton from using this alternative if approved by Agency and included as part of an amended operating permit.
- The commenter requested the inclusion of 40 CFR 63.749(c)(1). This was included as a separate requirement.
- The commenter requested an update to the language used to identify the compliance date for specialty coatings. The language in the regulatory paraphrase has been updated to be more consistent with the language in 40 CFR 63.749(a)(3).
- The commenter requested we remove the requirement for one-time energy assessment required under 40 CFR 63, Subpart DDDDD (Boiler NESHAP) and the notification of compliance status since the compliance dates have already passed. The Agency has removed from this table but retained the requirement to maintain records of the energy assessment in Section II.B.2.b.ii.
- The commenter requested that the Agency remove the applicable requirements that reference 40 CFR Part 60, Dc and 40 CFR 63, Subpart DDDDD. These are applicable requirements and are retained.
- The commenter requested DUC201 unit be removed from the table identifying abrasive blasting, cyclones, baghouses, and other particulate control operations since it is not required to have an NOCOA, and it is not subject to the monitoring method in Section II.B.3. This equipment has been removed.
- The commenter requested we clarify that 40 CFR 63.6640(f)(2)(ii) & (iii) have been vacated per Delaware v. EPA 785 F.3d 1 (D.C. Cir 2015). An emergency stationary RICE may not be operated for the purposes specified in 40 CFR 63.6640(f)(2)(ii)&(iii) (1/30/13) unless it meets the applicable requirements for a non-emergency engine. We have included this statement at the top of the applicable requirements table and deleted references to the vacated requirements.
- The commenter requested that the Agency remove the applicable requirements that reference 40 CFR Part 63, Subpart ZZZZ in I.B.4.9. This is an applicable requirement and is retained.

- The applicant requested the requirements in 40 CFR 63.6640(a) are unnecessary and redundant since it requires continuous compliance with Table 2c according to methods specified in Table 6 to 40 CFR, Subpart ZZZZ. The Agency has included this citation with applicable requirements and deleted as a separate requirement.
- The commenter requested that the requirements in 40 CFR 60.4211(a) not be repeated in the monitoring section. The applicable requirements in 40 CFR 60.4211(c) have been added to the applicable requirements and the duplicative requirements have been deleted from the monitoring section.
- The commenter requested that the Agency remove the applicable requirement requiring continuous compliance with each requirement in Table 2c according to methods specified in Table 6. This is retained as an applicable requirement.
- The commenter requested that requirements in Section I.B.4.25 not be repeated in the monitoring method. The requirements in 40 CFR 60.4211(a) have been removed from the monitoring section and added as an applicable requirement to Section I.B.4.
- The commenter requested we add language to the facility-wide monitoring in Section II.A.1.a that specifies it is not the Agency's intent that Boeing Renton startup an emergency generator for the purpose of determining opacity. Since the emergency generator should be tested monthly, it is assumed that any observation will be done within the 30 day period noted in the permit. This is consistent with the existing permit.
- For work practice inspections in Section II.A.1.d, the commenter requested we restore the language from the current permit as originally negotiated between PSCAA and Boeing approximately 15 years ago. The Agency reviewed the language in the current permit and the regulatory language in 40 CFR 63.749(c) and (i), and we do not have the authority to provide a grace period for noncompliance events identified in a federal rule. If Boeing observes noncompliance events as defined in 40 CFR 63.749(c), or a violation as defined by 40 CFR 63.749(i), they must be reported as a deviation of applicable permit term. The commenter raised concerns about the amount of pollution prevention resources available and the amount of resources that would be directed to investigations and reporting, instead of finding and fixing potential problems. The Agency would not expect extensive resources be put into this effort. For example, if a cleaning rag with VOC solvent is observed unattended after completion of use during the quarterly inspection (employee on break or after end of shift), we would expect the person observing the rag to place the rag in a close container, document the noncompliance event, and remind employees in this location of this requirement. Based on our inspections of the facility, the type of solvent used is always well marked and there are already practices in place to prevent noncompliance.
- Agency clarified the alternative operating scenario language in II.B.1.h based on comments received.
- The commenter requested the Agency add a statement in Section II.B.5.b stating that the required visual inspections of the Stage 1 system after each gasoline delivery can occur any time before the next delivery. The Agency concurs and has added this clarifying language to the permit.
- The commenter recommended changes to the PSD 11-02 monitoring, reporting and recordkeeping requirements to reflect that the 737 wing panel spray booths, the new in-

spar wing spray booth (PB-4) and the modified in-spar wing spray booth (PP-8) started operation in 2012. These changes have been accepted.

- An applicable requirement in PSD-11-02, Condition V.A.8 was omitted. It was added to the applicable requirements table.
- The commenter requested updates to the citations for outdoor burning in Section III.B. These changes have been made.
- The commenter requested we add 40 CFR 60.14, 40 CFR 63.15(d), and 40 CFR 63.5 to Section IV.A (New Source Review).
- These have been added since the Agency incorporates review of these requirements into our New Source review in Regulation I, Article 6.
- The commenter requested we clarify that a Notice of Completion required by Section IV.C is only required for sources subject to New Source Review requirements in Section IV.1. This clarification has been added.
- The commenter requested that each specific provision of Regulation III, Article 4 be itemized separately in the permit. This change has not been made.
- The commenter asked why the requirements for nonroad engines are included in Section IV.F since these are non-stationary sources. The Agency has determined that this is an applicable requirement as defined in WAC 173-401.
- The commenter requested changes to language in Section V.J regarding federal enforceability. These changes have been accepted. It clarifies that although WAC 173-401 regulation is not considered federally enforceable since it is not in the Washington State SIP; the required monitoring, maintenance and recordkeeping provisions are federally enforceable in the context of the federally enforceable applicable requirement to which the provisions apply (i.e. gap-filling monitoring requirements).
- The commenter requested we add additional language in general recordkeeping Section V.O.3. This is not consistent with the language in the regulation and has not been changed from the current permit. No change made.
- The commenter requested language additions to the ANESHAP Notification and Reporting requirements, Semiannual Compliance Reports. The language included in the permit is consistent with the regulation, but cross referencing to applicable requirements table have been accepted.
- The commenter requested several reports listed in Section V.Q.3. Summary of Required Submittals, not require certification. The Agency has reviewed this list and determined the following:
    - NESHAP Application for Approval of Construction or Reconstruction (40 CFR 63.5(d)(1): Requires certification. This is an application form required by this permit.
    - Administrative permit amendment request (WAC 173-401-720): No certification required.
    - PSD Permit Applications (WAC 173-400-141): Requires certification. This is an application form required by this permit.

- NOC Application (PSCAA Regulation I, Section 6.03): Requires certification. This is an application form required by this permit.
- NESHAP Notice of Compliance Status (40 CFR 63.9(h): Moved to notifications.
- Emergency provisions (WAC 173-401-645): Requires certification. This report documents an affirmative defense to an action brought for non-compliance and therefore would be considered a report required by this permit.
- Unavoidable Excess Emissions (WAC 173-400-107): Requires certification. This report documents unavoidable excess emissions for compliance purposes.
- Greenhouse Gas Emission Report (WAC 173-441): Certification as required by WAC 173-441 only.
- Emission Inventory (PSCAA Regulation I, Section 7.09(a)): Requires certification.
- Reports of Problems not Corrected within 24 hours: Requires certification. Compliance report required by the permit.
- Added Notice of Completion Notification requirements.
- Added NSPS Reconstruction Notification requirements.
- Updated Asbestos Project Notification to specify submitted through Agency website.

Statement of Basis:

- The Statement of Basis has been updated to reflect changes made to the permit based on the comments received. Other substantive comments are discussed below:
- The commenter requested that several additional attachments be added to the Statement of Basis. Many of the attachments included in the draft Statement of Basis and requested for addition 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, we reviewed all attachments and determined the Agency 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. A discussion of each attachment is provided below:
  - Attachment 1: 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 2: 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 Notice of Construction OA, 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 3: 1998 Agency determination for determining solvent composition limits. The Agency believes language in the rule is clear and the attachment has been deleted.

- Attachment 4: The Agency reviewed a specific operation in 1996 and determined not flush cleaning. The Agency will continue to use the regulatory language in the NESHAP. The attachment has been deleted. This exclusion does not preclude the attachment from being used in later interpretation.
- Attachment 5: 2000 determination that Safety Kleen Models 1107 and 1111 gun cleaning systems meet requirements in NESHAP. The Agency will continue to use the regulatory language in the NESHAP to make these determinations. The attachment has been deleted. This exclusion does not imply that the determination made is not valid.
- Attachment 6: 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 imply that the determination made is not valid.
- Attachment 7: Guidance on O&M requirements (2/26/93). This letter clarified record keeping regarding operation and maintenance of fume hoods or ovens is not required, unless special conditions or other regulatory requirements are imposed on the specific fume hood or oven operation. The Agency's decision remains in effect.
- Attachment 8 (9/14/01): The information in this attachment is included in Section 8.1 above. Inclusion of the attachment is unnecessary.
- Attachments 9 (1/9/98) and 10 (10/10/01): The Agency clarified in the 1/9/98 letter that a Notice of Construction 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, but exclusion does not does imply that the determination made is not valid.

- The commenter requested we add the following attachments:
  - EPA National Emissions Standards for Aerospace Manufacturing and Rework Facilities (Subpart GG) – Guidance Document, Fall 2016. This is a guidance document. The Agency will use this as guidance as appropriate, but we do not believe it should be included in the Statement of Basis.
  - An attachment stating we agreed that low end of paint booth pressure drop ranges may be zero (1999). This range is included in the permit so there is no

need to include this attachment. New or modified spray booths will be reviewed through the Regulation I, Article 6 program and best available control technology will be determined at that time (including monitoring and recordkeeping provisions).

- 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.
- An e-mail written in 2003 interpreting monthly and weekly. This e-mail suggests Boeing use its best judgement in forming and following interpretations while ensuring requirements of the AOP are being met. We do not believe an attachment is needed for this situation.
- A 12/23/11 e-mail from Agata McIntyre to Charlie Keller clarifying that inspection of Stage 1 system on the gasoline stations that are required after each product delivery can occur any time before the next delivery. This clarifying language has been added to the permit and the Statement of Basis, so the attachment is not needed.
- 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.

12.1 Administrative Amendments

On April 1, 2019, the Agency received an email informing the Agency that the responsible official had changed to Eric Lindblad and the site contact had changed to Johnathan Sherman. These changes were made.

On August 9, 2019, the Agency received a letter informing the Agency that the responsible official had changed to Mark Jenks. This change was made.