

**1. Revise any dates of regulation citations to current dates, where appropriate.**

The SIP-approved dates on EPA Region X's website were reviewed. A word version of the subject AOP for renewal was marked and is submitted with this document. It is to show the current WAC and PSCAA SIP approved dates and PSCAA (state only) regulation dates. For some of the applicable requirements, reference is made to the pending SIP approval of newer versions. It is possible that the versions referenced pending SIP approval, are either the most current version, or the version with an earlier submittal for SIP review.

**2. Add Attachments to the AOP.**

There are 19 attachments to the AOP. However, only the first 15 are posted on the web. Please add attachments 16, 17, 18 and 19. Copies are enclosed.

**3. Revise in the Statement of Basis: 2. 5 Compliance Assurance Monitoring (From Statement of Basis)**

Puget Sound Clean Air Agency has reviewed the applicability of the Compliance Assurance Monitoring (CAM) rule to the NBF/Plant 2 facility and has determined that none of the units in place at the NBF/Plant 2 facility satisfy the CAM applicability criteria.

The table below presents the list of significant units that are subject to an emission limitation (40 CFR 64.2(a)(1) and that use a control device to achieve compliance with that limitation (40 CFR 64.2(a)(2). The only applicable emission limitations were the PSCAA Regulation I, Article 9.09, Particulate Matter Emissions Standards and the NOCOA 9332 total chromium emission limitation. The units meeting those applicability requirements were evaluated for potential pre-control emissions to determine if any exceeded the major source thresholds (40 CFR 64.2(a)(3). Conservative estimates of potential emissions for all units are below the major source threshold. There are other units at the facility that either have no relevant limits or do not have control devices, so potential emissions were not estimated. Also, there are PSCAA NOC exempt units that could satisfy both the emission limitation and control device applicability criteria, however, as presumable, conservative estimates of potential pre-control emissions are well below the major source thresholds.

MSS#	BLDG	Equipment	Emission limitation or standard other than exempt limitations and standards for the applicable regulated air pollutant 40 CFR 64.2 (a)(1)	Control device to achieve compliance with any such emission limitation or standard? 40 CFR 64.2(a)(2)	Does the unit have the potential pre-control device emissions > 100% of the tpy amount to be classified as a major source? 40 CFR 64.2(a)(3)
DUC7460	2-88	Woodworking shop	0.05grain/dscf	Filter system	No
PB0018	2-122	Paint/Grind Booth	0.05grain/dscf	Filter system	No
PB9006	2-88	Paint Booth	0.05grain/dscf	Filter system	No
PB5004	3-365	Paint Booth	0.05grain/dscf	Filter system	No
RV5004	3-369	Paint Hangar P3	0.05grain/dscf	Filter system	No
RV5003	3-369	Paint Hangar P4	0.05grain/dscf	Filter system	No
PB5001	3-370	Paint Booth	0.05grain/dscf	Filter system	No
PB5008	3-380	Paint Booth	0.05grain/dscf	Filter system	No
F50020,	3-380	Paint Hangar P5	0.05grain/dscf	Filter system	No
F50021	3-380	Paint Hangar P6	0.05grain/dscf	Filter system	No
PB5002	3-818	Paint Booth	0.05grain/dscf	Filter system	No
DUC515	3-818	Sanders & Band Saw	0.05grain/dscf	Filter system	No
SND511	3-818	Abrasive blast unit	0.05grain/dscf	Filter system	No
DUC369	3-369	Wastewater treatment plant mix room exhaust	0.05grain/dscf	Filter system	No
VS0044	2-10	Machine shop	0.05grain/dscf	Filter system	No
VS0012	2-10	Machine shop	0.05grain/dscf	Filter system	No
VS0143	2-10	Machine shop	0.05grain/dscf	Filter system	No
NOC 9332	2-122	Spray Booth	0.05grain/dscf	Filter system	No
NOC 9332	2-122	Tankline	0.01 mg/dscm of total chromium & 0.05 grain/dscf	Scrubber	No

**4. EU 1 is now marked as “reserved”. Add to the permit for NOCOA 9332 content for “EU 1 Chemical Process Tankline Operations”.**

The scrubber tankline is essentially the same as the one existing at Renton. The Boeing Renton EU has been modified specific to NOCOA 9332 special conditions.

**Chemical Process Tankline Operations**

**DESCRIPTION:** This section includes the equipment listed below and all activities associated with chemical process tankline and fume

scrubber operations. This includes some hard chrome electroplating tank and chromic acid anodize tanks. These chrome tanks are in research & development laboratories, and thereby exempt (40 CFR 63.340(d)) from the Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks NESHAP (40 CFR Part 63 Subpart N).

<i>Bldg.</i>	<i>Order of Approval No.</i>	<i>Install Date</i>	<i>Source Description</i>
2-122	9332	2006	26,000 a cfm Packed bed scrubber system for Research and Development tank line.

*Data in italics are for information only and not enforceable conditions of this permit.*

---

**COMPLIANCE REQUIREMENTS:**

<b>Reqmt. No.</b>	<b>Enforceable Requirement</b>	<b>Requirement Paraphrase (For Information Only)</b>	<b>Monitoring, Maintenance &amp; Recordkeeping Method (See Section II)</b>	<b>Reference Test Method (See Section VIII)</b>
<p>a) Requirements EU 1.1 through EU 1.4 are the Puget Sound Clean Air Agency requirements that apply to chemical process tank line operations.</p>				
EU 1.1	<p>Puget Sound Clean Air Agency Reg I, 7.09(b) (9/12/96) <i>This requirement will be superseded upon adoption of the 9/10/1998 version of Reg I, 7.09(b) into the SIP</i></p> <p>Puget Sound Clean Air Agency Reg I, 7.09(b) (9/10/98) <i>(State Only)</i> <i>This requirement shall become federally enforceable upon adoption into the SIP and will replace the 9/12/96 version of Reg I, 7.09(b)</i></p>	Develop and implement an Operation and Maintenance Plan to assure continuous compliance with Puget Sound Clean Air Agency Regulations I, II, and III.	II.B Operation and Maintenance (O&M) Plan Requirements.  This monitoring method supersedes the monitoring method for this requirement listed in I.A.11	
EU 1.2	<p>Puget Sound Clean Air Agency Reg I: 9.20(a) (6/9/88)</p> <p>RCW 70.94.152(7) 1996 (State Only)</p>	Maintain equipment in good working order that has received an NOC Order of Approval.	II.A.2(d)(vi) Laboratory Tankline Scrubber Maintenance II.A.1(c) Facility Inspections	

Reqmt. No.	Enforceable Requirement	Requirement Paraphrase (For Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Reference Test Method (See Section VIII)
EU 1.3	<p>Puget Sound Clean Air Agency Reg I, 9.03 (9/08/1994 3/11/99) <i>This requirement will be superseded upon adoption of the 3/11/99 25/04 version of Reg I, 9.03 into the SIP</i></p> <p>Puget Sound Clean Air Agency Reg. I, 9.03 (3/11/99 25/04/1999) <i>(State Only). This requirement will become federally enforceable upon adoption into the SIP and will replace the 9/08/94 3/11/99 version of Reg I, 9.03</i></p> <p>WAC 173-400-040(1) <u>(a), (b), &amp; (e)</u> (8/20/1993) <i>This requirement will be superseded upon adoption of the 9/15/04 2/10/05 version of WAC 173-400-040(1) into the SIP</i></p> <p>WAC 173-400-040(1) <u>(9/15/04 2/10/05)</u> <i>(State Only). This requirement will become federally enforceable upon adoption into the SIP and will replace the 8/20/93 version of WAC 173-400-040(1)</i></p>	<p>Shall not emit air contaminants in excess of 20% opacity for more than 3 minutes per hour</p>	<p>II.A.2(d)(vi)                      Laboratory                      Tankline                      Scrubber                      Maintenance                      II.A.1(b)                      Complaint Response                      II.A.1(c) Facility Inspections                      These monitoring methods supersede the monitoring method for this requirement listed in I.A.1</p>	<p>Ecology Method 9A (See Section VIII)</p>

Reqmt. No.	Enforceable Requirement	Requirement Paraphrase (For Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Reference Test Method (See Section VIII)
EU 1.4	<p>Puget Sound Clean Air Agency Reg I, 9.09(a) (2/10/1994) <i>This requirement will be superseded upon adoption of the 4/9/98 version of Reg I, 9.09 into the SIP</i></p> <p>Puget Sound Clean Air Agency Reg I, 9.09 (4/09/1998) <i>(State Only)</i> <i>This requirement will become federally enforceable and will be effective in this table upon adoption of the 4/9/1998 version of Reg I, 9.09 into the SIP</i></p> <p>WAC 173-400-060 (8/20/933/22/91) <i>This requirement shall be superseded by the 9/15/012/10/05 version of WAC 173-400-060 upon its adoption into the SIP</i></p> <p>WAC 173-400-060 (9/15/012/10/05) <i>(State Only)</i>. <i>This requirement will become federally enforceable upon adoption into the SIP and will replace the 8/20/933/22/91 version of WAC 173-400-060</i></p>	<p>Shall not emit particulate matter in excess of 0.05 gr/dscf from equipment used in a manufacturing process and general process units, uncorrected for excess air</p>	<p>II.A.2(d)(vi)                      Laboratory                      Tankline                      Scrubber                      Maintenance                      II.A.1(b)                      Complaint Response                      II.A.1(c) Facility Inspections                      These monitoring methods supersede the monitoring method for this requirement listed in I.A.2</p>	<p>Puget Sound Clean Air Agency Method 5 (See Section VIII)</p>
<p>b) Requirements No. EU 1.5 through EU 1.14 are the Puget Sound Clean Air Agency Order of Approval Condition for Order of Approval No. 9332</p>				
EU 1.5	Puget Sound Clean Air Agency Order of Approval No. 9332 (2/17/06) (12)	Tanklines A, B, C, D, and E shall be used for R&D purposes only.	II.A.1(c) Facility Inspections	
EU 1.6	Puget Sound Clean Air Agency Order of Approval No. 9332 (2/17/06) (13)	All air exhaust from tanklines A, B, C, D, and E shall vent to the tankline scrubber.	II.A.1(c) Facility Inspections	

Reqmt. No.	Enforceable Requirement	Requirement Paraphrase (For Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Reference Test Method (See Section VIII)
EU 1.7	Puget Sound Clean Air Agency Order of Approval No. 9332 (2/17/06) (14)	The tankline scrubber shall be operated any time electric current is applied to any tank in tanklines A, B, C, D, or E.	II.A.1(c) Facility Inspections	
EU 1.8	Puget Sound Clean Air Agency Order of Approval No. 9332 (2/17/06) (15)	The surface of tanks containing chromium solutions shall be covered by poly balls. The percent of surface coverage shall be equal to or greater than that used during the Method 306A test required by Condition 21.	II.A.1(c) Facility Inspections	
EU 1.9	Puget Sound Clean Air Agency Order of Approval No. 9332 (2/17/06) (16)	The scrubber shall be equipped with a pressure drop monitor or gauge and a pH monitor or gauge. The acceptable ranges shall be marked on or near the gauges within 60 days of startup.	II.A.2(d)(vi) Laboratory Tankline Scrubber Maintenance	
EU 1.10	Puget Sound Clean Air Agency Order of Approval No. 9332 (2/17/06) (17)	The pH of the scrubber shall be maintained between 4 and 10.	II.A.2(d)(vi) Laboratory Tankline Scrubber Maintenance	
EU 1.11	Puget Sound Clean Air Agency Order of Approval No. 9332 (2/17/06) (18)	Boeing shall check the pressure drop to verify that it is maintained within the acceptable ranges at least weekly during weeks when the scrubber is operated.	II.A.2(d)(vi) Laboratory Tankline Scrubber Maintenance	
EU 1.12	Puget Sound Clean Air Agency Order of Approval No. 9332 (2/17/06) (19)	Boeing shall check the scrubber pH and the scrubber nozzles for pluggage and even flow patters at least quarterly.	II.A.2(d)(vi) Laboratory Tankline Scrubber Maintenance	
EU 1.13	Puget Sound Clean Air Agency Order of Approval No. 9332 (2/17/06) (20)	The emissions from the outlet of the scrubber shall be limited to 0.15 mg/amp-hr of hexavalent chromium and 0.01 mg/dscm of total chromium.	<u>Documentation on file</u>	<u>EPA Method 306A</u>

Reqmt. No.	Enforceable Requirement	Requirement Paraphrase (For Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Reference Test Method (See Section VIII)
EU 1.14	Puget Sound Clean Air Agency Order of Approval No. 9332 (2/17/06) (21)	Within 90 days after the start of operation of the tankline scrubber, Boeing shall conduct a source test using EPA Method 306A on the exhaust of the scrubber to determine whether the scrubber is operating in compliance with Condition 20. The test shall be conducted in compliance with Agency Regulation I Section 3.07. During the test, Boeing shall: Operate only chromium electroplating or anodizing tanks; Operate the scrubber at a pH of 4.	<u>Propose we omit this because the test will have been completed before the Renewed permit gets issued.</u>	EPA Method 306A

---

**EXEMPTIONS, EXTENSIONS AND DETERMINATIONS GRANTED BY AGENCIES:**

Source	Description
1. Puget Sound Clean Air Agency	Notice of Construction Requirements for Scrubbers and Baghouses. Discusses what types of changes are considered "substantial alterations" for scrubbers and baghouses. Letter dated October 10, 2001, Steve M. Van Slyke to Jade Hudson, the Boeing Company. See Attachment 15.

**5. AOP page 99, Revise as shown:**

**(viii) Laboratory Tankline Scrubbers for Metal Finishing  
Tankline Maintenance**

**RESERVED**

Replace “reserved” with the AOP the monitoring methods for the tankline scrubbers listed below. These methods are copied from the Boeing Renton AOP.

***Laboratory Tankline Scrubber Maintenance***

Boeing shall inspect the packed bed wet scrubbers used to control emissions from laboratory tankline operations as follows:

- At least once each month, except as provided under Section V.P Data recovery of this permit, inspect the pump for proper operation. If during inspection or any other time, Boeing discovers that the pump is not operating properly, resulting in a potential compliance problem with respect to an applicable requirement for which this section II.A.2(d)(vi) is an applicable monitoring method, Boeing shall, within 24 hours after identification, correct the problem, shutdown the operation, or report according to Section V.Q.5 Report of Problems not Corrected Within 24 hours. If Boeing corrects pump problems within 24 hours of initial observation or shuts down the unit or activity within 24 hours until it is repaired or corrected, Boeing does not need to report the deviation under Section V.M Compliance certifications or V.Q Reporting of this permit.
- At least once each month, except as provided under Section V.P Data recovery of this permit, inspect for visible emissions exclusive of uncombined water vapor while the scrubber is in operation. Inspections are to be performed while the scrubber is in operation during daylight hours. If during such inspections visible emissions other than uncombined water are observed from a single unit or activity, Boeing shall, as soon as practicable but within 24 hours of the initial observation:
  - i) Take corrective action, which may include shutting down the unit or activity until there are no visible emissions; (or until the unit or activity is demonstrated to be in compliance with all applicable opacity limitations in the permit using the reference test method); or
  - ii) Determine the opacity using the reference test method, or
  - iii) Observe for a minimum of 15 minutes, or until visible emissions have been observed for a total of 45 seconds, whichever is a shorter period. Observations for visible emissions shall be at 15-second intervals. If visible emissions other than uncombined water are observed from a single unit or activity lasting longer than 45 seconds during a 15 minute interval, Boeing may continue to observe visible emissions for an additional 45 minutes or until visible emissions have been observed for a total of 3 minutes in the hour, whichever is a shorter period. If visible emissions are observed for a total of 3 minutes during the 60 minute observation, or if visible emissions have been observed for a total of 45 seconds during the 15 minute observation, and Boeing did not elect to continue the visible emission inspection as described above, Boeing shall, as soon as practicable but within 24 hours of the initial observation either;

May 15, 2006

Attachment 1 to 66-ZE-1370-GVM-19

Page 9 of 28

- Take corrective action, which may include shutting down the unit or activity until it can be repaired, until there are no visible emissions (or until the unit or activity is demonstrated to be in compliance with all applicable opacity limitations in the permit using the reference test method); or,
- Alternatively, determine the opacity using the reference test method.

For scrubbers which recirculate fluid, at least once each calendar quarter check that the pH of the scrubber recirculation fluid is between 4 and 10. If the pH is not within the acceptable range, Boeing shall, as soon as practicable but within 24 hours of the initial observation take corrective action to bring the pH to between 4 and 10, shut down the unit or activity until it can be repaired, or report according to Section V.Q.5 Report of Problems not Corrected Within 24 hours.

Once each calendar quarter, inspect the nozzles for pluggage and even flow patterns. If sufficient plugged nozzles or uneven flow patterns that could cause violation of applicable emission standards are observed, Boeing shall, as soon as practicable but within 24 hours of the initial observation correct the problem, shut down the unit or activity until it can be repaired, or report according to Section V.Q.5 Report of Problems not Corrected Within 24 hours.

All observations using the opacity reference test method shall be reported according to V.Q.4 Method 9A Reports.

Where required by an Order of Approval condition, a pressure drop transmitter or gauge shall be installed to measure the pressure drop across the scrubber. The acceptable pressure drop range shall be marked on, nearby the gauge, or on a pressure drop log. A record that the pressure drop was in the acceptable range shall be made according to the frequency specified in the Order of Approval condition or at least once per month if not specified in the Order of Approval. If the pressure drop is not within the acceptable range, Boeing shall, as soon as practicable but within 24 hours of the initial observation; correct the pressure drop, shut down the unit or activity until it can be repaired or corrected, or report according to Section V.Q.5 Report of Problems not Corrected within 24 hours. Failure to take corrective action as described above must be reported under Section V.M Compliance certifications or V.Q Reporting of this permit.

[WAC 173-401-615(1)(b), 10/17/02]

## **6. Delete EU 11. Laser Operations**

The equipment has been removed from the plant site, so please delete this EU.

## **7. Add to the AOP an emission unit for the vapor degreaser approved per NOCOA 9332.**

This is being relocated from Boeing Renton to the 2-122 bldg. The EU is copied from the Boeing Renton AOP, then modified to the specific NOCOA 9332. In the statement of basis, please add a comment that Boeing may start up the vapor degreaser using a non-Subpart T solvent, and as such, will not be subject to Subpart T requirements. However, once a Subpart T solvent is used in the vapor degreaser, then the vapor degreaser will remain subject to Subpart T, for whatever solvent is used, until a revised Order of Approval is issued.

### **EU 11. Vapor Degreasing Operations**

**DESCRIPTION:** *This section includes all activities and equipment associated with vapor degreasing operations, including degreasing, distillation, and storage.*

<i>Bldg.</i>	<i>MSS/ID No.</i>	<i>Order of Approval No.</i>	<i>Install Date</i>	<i>Source Description</i>
2-122		9332	1990	<i>Batch machine, &lt;13 square feet air solvent interface, without lip exhaust.</i>

*Data in italics are for information only and are not enforceable conditions of this permit.*

---

#### **COMPLIANCE REQUIREMENTS:**

<b>Reqmt. No.</b>	<b>Enforceable Requirement</b>	<b>Requirement Paraphrase (For Information Only)</b>	<b>Monitoring, Maintenance &amp; Recordkeeping Method (See Section II)</b>
<p>(a) Requirement Nos. EU 11.1 through EU 11.13 are the NESHAP General Provisions (40 CFR 63 Subpart A). Applicability of 40 CFR 63 Subpart A is defined in Table 1 to Subpart T of Part 63. Table 1 supersedes this permit, if an apparent conflict exists.</p>			
EU 11.1	40 CFR 63.1(c)(1), 63.4 (4/5/02)	Must comply with 40 CFR 63 Subpart A and T.	No Monitoring Required (NMR)
EU 11.2	40 CFR 63.5 (4/5/02)	Must comply with preconstruction review requirements if reconstructing source.	NMR

Reqmt. No.	Enforceable Requirement	Requirement Paragraph (For Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)
EU 11.3	40 CFR 63.6(b)(2) (4/5/02)	New and reconstructed affected sources that have an initial startup after the effective date of 40 CFR 63 Subpart T must comply with the requirements of Subpart T upon startup.	NMR
EU 11.4	40 CFR 63.6(e)(1) (4/5/02)	At all times, including startup, shutdown, and malfunction, must operate and maintain affected sources consistent with good air pollution control practice. Correct malfunctions as soon as practicable after their occurrence.	II.A.2(d)(vii) Vapor Degreasers Maintenance II.A.2(l) Vapor Degreaser Closed Cover II.A.2(m) Vapor Degreaser Hoist Speed II.A.2(n) Vapor Degreaser Air Blanket Center Temperature
EU 11.5	40 CFR 63.6(f) (4/5/02)	The nonopacity emission standards set forth in Subpart A shall apply at all times except during periods of startup, shutdown, and malfunction as set forth in 40 CFR Part 63 Subparts A & T.	II.A.2(d)(vii) Vapor Degreasers Maintenance II.A.2(l) Vapor Degreaser Closed Cover II.A.2(m) Vapor Degreaser Hoist Speed II.A.2(n) Vapor Degreaser Air Blanket Center Temperature
EU 11.6	40 CFR 63.8 (a)(1), (a)(2), & (b)(1) (4/5/02)	Conduct of monitoring. Monitoring shall be conducted as set forth in Subparts A & T.	II.A.2(d)(vii) Vapor Degreasers Maintenance II.A.2(l) Vapor Degreaser Closed Cover II.A.2(m) Vapor Degreaser Hoist Speed II.A.2(n) Vapor Degreaser Air Blanket Center Temperature
EU 11.7	40 CFR 63.8(f) (4/5/02)	Boeing must receive permission from the Puget Sound Clean Air Agency before using an alternative monitoring procedure.	NMR
EU 11.8	40 CFR 63.9(b)(3), (b)(5) (4/5/02)	Boeing shall notify the Puget Sound Clean Air Agency according to 40 CFR 63.9(b)(3)-(5) if it constructs or reconstructs a new affected source. Subpart T, 63.468(a)-(b) has some more information requirements specific to the vapor degreasers.	NMR
EU 11.9	40 CFR 63.9(i) (4/5/02)	Adjustment to time periods or postmark deadlines for submittal and review of required communications may be requested from and approved by the Puget Sound Clean Air Agency.	NMR

Reqmt. No.	Enforceable Requirement	Requirement Paraphrase (For Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)
EU 11.10	40 CFR 63.9(j) (4/5/02)	Notification Requirements. Any change in the information already provided under 40 CFR 63.9 shall be sent to the Puget Sound Clean Air Agency within 15 days after the change.	NMR
EU 11.11	40 CFR 63.10(a)(3)-(7) (4/5/02)	Boeing must send the reports according to 40 CFR 63.10(a)(3)-(7) and can request alternate reporting dates.	NMR
EU 11.12	40 CFR 63.10(f) (4/5/02)	Boeing must comply with the recordkeeping and reporting requirements in 40 CFR 63.10 unless a waiver is granted by the Puget Sound Clean Air Agency.	NMR
EU 11.13	40 CFR 63.10(d)(1) (4/5/02)	Boeing shall submit reports in accordance with 40 CFR 63 Subpart T.	NMR
<b>(b) Requirement Nos. 11.14 through EU 11.48 are the Halogenated Solvent Cleaning NESHAP requirements.</b>			
EU 11.14	40 CFR 63.463(a)(1)(i) ( <u>6/23/03</u> )	Cleaning machine shall be designed and operated with: 1) An idling and downtime mode cover, as described in § 63.463(d)(1)(i), that may be readily opened or closed, that completely covers the cleaning machine openings when in place, and is free of cracks, holes, and other defects.	II.A.2(l) Vapor Degreaser Closed Cover
EU 11.15	40 CFR 63.463(a)(2) ( <u>6/23/03</u> )	Each cleaning machine shall have a freeboard ratio of 0.75 or greater.	II.A.2(c) Documentation on File
EU 11.16	40 CFR 63.463(a)(3) ( <u>6/23/03</u> )	Each cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts.	II.A.2(m) Vapor Degreaser Hoist Speed
EU 11.17	40 CFR 63.463(a)(4) ( <u>6/23/03</u> )	Each vapor cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils.	II.A.2(d)(vii) Vapor Degreasers Maintenance
EU 11.18	40 CFR 63.463(a)(5) ( <u>6/23/03</u> )	Each vapor cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.	II.A.2(d)(vii) Vapor Degreasers Maintenance
EU 11.19	40 CFR 63.463(a)(6) ( <u>6/23/03</u> )	Each vapor cleaning machine shall have a primary condenser.	II.A.2(c) Documentation on File
EU 11.20	40 CFR 63.463(b)(1)(i) ( <u>6/23/03</u> )	Employ one of the control combinations listed in Table 1 of 40 CFR 63.463(b)(1).	II.A.2(c) Documentation on File II.A.2(n) Vapor Degreaser Air Blanket Center Temperature

Reqmt. No.	Enforceable Requirement	Requirement Paraphrase (For Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)
EU 11.21	40 CFR 63.463(d)(1)(i) (6/23/03)	Cover(s) to each solvent cleaning machine shall be in place during the idling mode, and during the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover(s) to not be in place.	II.A.2(l) Vapor Degreaser Closed Cover
EU 11.22	40 CFR 63.463(d)(2) (6/23/03)	The parts baskets or the parts being cleaned shall not occupy more than 50% of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less.	II.A.2(c) Documentation on File
EU 11.23	40 CFR 63.463(d)(3) (6/23/03)	Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine)	II.A.1(d) Work Practice Inspection
EU 11.24	40 CFR 63.463(d)(4) (6/23/03)	Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed from the cleaning machine.	II.A.1(d) Work Practice Inspection
EU 11.25	40 CFR 63.463(d)(5) (6/23/03)	Parts baskets or parts shall not be removed from any solvent cleaning machine until dripping has stopped.	II.A.1(d) Work Practice Inspection
EU 11.26	40 CFR 63.463(d)(6) (6/23/03)	During startup of each cleaning machine, the primary condenser shall be turned on before the sump heater.	II.A.1(d) Work Practice Inspection
EU 11.27	40 CFR 63.463(d)(7) (6/23/03)	During shutdown of each cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.	II.A.1(d) Work Practice Inspection
EU 11.28	40 CFR 63.463(d)(8) (6/23/03)	When solvent is added or drained from any cleaning machine, the solvent shall be transferred using threaded or other leak proof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.	II.A.2(c) Documentation on File
EU 11.29	40 CFR 63.463(d)(9) (6/23/03)	Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance procedures approved by the Administrator.	II.A.2(d)(vii) Vapor Degreasers Maintenance
EU 11.30	40 CFR 63.463(d)(10) (6/23/03)	Each operator of a solvent cleaning machine shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in Appendix B of 40 CFR Part 63 Subpart T if requested during an inspection by the Puget Sound Clean Air Agency.	NMR
EU 11.31	40 CFR 63.463(d)(11) (6/23/03)	Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from container.	II.A.1(d) Work Practice Inspection

Reqmt. No.	Enforceable Requirement	Requirement Paraphrase (For Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)
EU 11.32	40 CFR 63.463(d)(12) (6/23/03)	Sponges, fabric, wood, and paper products shall not be cleaned.	II.A.1(d) Work Practice Inspection
EU 11.33	40 CFR 63.463(e)(1) (6/23/03)	Must conduct monitoring of each control device used to comply with 40 CFR 63.463 as provided in 40 CFR 63.466.	II.A.2(d)(vii) Vapor Degreasers Maintenance II.A.2(l) Vapor Degreaser Closed Cover II.A.2(m) Vapor Degreaser Hoist Speed II.A.2(n) Vapor Degreaser Air Blanket Center Temperature
EU 11.34	40 CFR 63.463(e)(2)(i) (6/23/03)	For freeboard refrigeration device, must ensure that the chilled air blanket temperature measured at the center of the air blanket is no greater than 30% of the solvent's boiling point.	II.A.2(n) Vapor Degreaser Air Blanket Center Temperature
EU 11.35	40 CFR 63.463(e)(3) (6/23/03)	If any of the requirements of 40 CFR 63.463(e)(2) are not met, Boeing must determine whether an exceedance of the Freeboard Refrigeration Device or Hoist Speed has occurred using the criteria of 40 CFR 63.463(e)(3)(i) and (ii).	NMR
EU 11.36	40 CFR 63.463(e) (4) (6/23/03)	Boeing shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in 63.468(h)	II.A.2(c) Documentation on File
EU 11.37	40 CFR 63.465(e) (6/23/03)	Boeing must determine potential to emit from all solvent cleaning operations using the procedures described in paragraphs 40 CFR 63.465(e)(1) through (e)(3).	II.A.2(c) Documentation on File
EU 11.38	40 CFR 63.466(a)(1) (12/3/99)	For freeboard refrigeration device, Boeing must use a thermometer or thermocouple to measure and record the temperature at the center of the air blanket during idling modes weekly.	II.A.2(n) Vapor Degreaser Air Blanket Center Temperature
EU 11.39	40 CFR 63.466(c) (12/3/99)	Boeing must monitor the hoist speed monthly. If after the first year, no exceedances of the hoist speed are measured, may begin monitoring quarterly. If an exceedance of the hoist speed occurs during quarterly monitoring, must return to monthly monitoring until another year of compliance without an exceedance is demonstrated.	II.A.2(m) Vapor Degreaser Hoist Speed
EU 11.40	40 CFR 63.466(b)(1) (12/3/99)	Boeing shall monthly visually inspect that the cover is opening, closing properly, completely covers the cleaning machine opening when closed, and is free of cracks, holes, and other defects.	II.A.2(l) Vapor Degreaser Closed Cover
EU 11.41	40 CFR 63.466(g) (12/3/99)	Boeing may use alternative monitoring procedures for control devices listed in 40 CFR 63.466(a) through (e) approved by the Administrator.	NMR
EU 11.42	40 CFR 63.467(a)(1) (6/23/03)	Boeing shall keep owner's manuals, or if not available, written maintenance and operating procedures, for the solvent cleaning machine and control equipment, for the lifetime of the machine.	II.A.2(c) Documentation on File

Reqmt. No.	Enforceable Requirement	Requirement Paragraph (For Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)
EU 11.43	40 CFR 63.467(a)(2) (6/23/03)	Boeing shall keep the date of installation for the solvent cleaning machine and all of its control devices for the lifetime of the machine. If the exact date for installation is not known, a letter certifying that the cleaning machine and its control devices were installed prior to, or on, November 29, 1993, or after November 29, 1993, may be substituted.	II.A.2(c) Documentation on File
EU 11.44	40 CFR 63.467(a)(5) (6/23/03)	Boeing shall keep records of the halogenated HAP solvent content for each solvent used in a solvent cleaning machine subject to the provisions of this subpart for the lifetime of the machine.	II.A.2(c) Documentation on File
EU 11.45	40 CFR 63.467(b)(1) (6/23/03)	Boeing shall keep results of control device monitoring (Closed Cover, Hoist Speed, and Vapor Blanket Center Temperature) required under 40 CFR 63.466 for 5 years.	II.A.2(c) Documentation on File
EU 11.46	40 CFR 63.467(b)(2) (6/23/03)	Boeing shall keep the information on the actions taken to comply with 40 CFR 63.463(e) for 5 years. This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.	II.A.2(c) Documentation on File
EU 11.47	40 CFR 63.467(b)(3) (6/23/03)	Boeing shall keep estimates of annual solvent consumption for each solvent cleaning machine for 5 years.	II.A.2(c) Documentation on File
EU 11.48	40 CFR 63.469 (12/2/94)	The Puget Sound Clean Air Agency may approve the use of equipment or procedures after they have been demonstrated to be equivalent to those prescribed for compliance within 40 CFR Part 63 Subpart T.	NMR
(c) Requirement Nos. EU 11.49 through EU 11.60 are the Puget Sound Clean Air Agency and WAC requirements for solvent metal cleaners.			
EU 11.49	WAC 173-460-060(5)(a)(i) (8/21/98) (State Only)	The cover shall always remain closed except when processing work. The cover shall be closed to the maximum extent possible at all times.	II.A.2(d)(vii) Vapor Degreasers Maintenance
EU 11.50	WAC 173-460-060(5)(a)(ii) and (b)(iv) (8/21/98) (State Only)	The cleaner must have a parts draining facility such that the drained solvent returns to the solvent tank.	II.A.2(c) Documentation on File
EU 11.51	WAC 173-460-060(5)(a)(iv) (A) (8/21/98) (State Only)	The cleaner must have a high vapor cutoff thermostat with manual reset required.	II.A.2(d)(vii) Vapor Degreasers Maintenance
EU 11.52	WAC 173-460-060(5)(a)(iv) (B) (8/21/98) (State Only)	The cleaner must have a vapor-up thermostat which will allow spray operations only after the vapor zone has risen to the design level.	II.A.2(d)(vii) Vapor Degreasers Maintenance

Reqmt. No.	Enforceable Requirement	Requirement Paraphrase (For Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)
EU 11.53	WAC 173-460-060(5)(b)(i) (8/21/98) (State Only)	Solvent shall not leak from any portion of the equipment.	II.A.2(d)(vii) Vapor Degreasers Maintenance
EU 11.54	WAC 173-460-060(5)(b)(ii) (8/21/98) (State Only)	Solvent shall be stored in closed containers and disposed of to prevent evaporation.	II.A.1(d) Work Practice Inspection
EU 11.55	WAC 173-460-060(5)(c)(i) (8/21/98) (State Only)	Racked parts shall be allowed to fully drain.	II.A.1(d) Work Practice Inspection
EU 11.56	WAC 173-460-060(5)(c)(ii) (8/21/98) (State Only)	Parts must be degreased in vapor zone until condensation ceases.	II.A.1(d) Work Practice Inspection
EU 11.57	WAC 173-460-060(5)(c)(iii) (8/21/98) (State Only)	Spraying operations shall be done within the vapor layer.	II.A.1(d) Work Practice Inspection
EU 11.58	WAC 173-460-060(5)(c)(iv) (8/21/98) (State Only)	If using powered hoist, vertical speed of parts moved in and out of vapor zone must be less than 10 feet per minute.	II.A.2(m) Vapor Degreaser Hoist Speed
EU 11.59	WAC 173-460-060(5)(c)(v) (8/21/98) (State Only)	The lip of the degreaser shall not be exposed to steady drafts greater than 50 feet per minute when cover is open.	II.A.2(d)(vii) Vapor Degreasers Maintenance
EU 11.60	WAC 173-460-060(5)(a)(iv) (C) (8/21/98) (State Only)	Freeboard ratio must be greater than or equal to 1.00.	II.A.2(c) Documentation on File

Reqmt. No.	Enforceable Requirement	Requirement Parphrase (For Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)
(d) Requirement Nos. EU 11.61 and EU 11.62 are the Puget Sound Clean Air Agency O&M requirements for operating permit sources.			
EU 11.61	<p>Puget Sound Clean Air Agency Reg I, 7.09(b) <i>(9/12/96) This requirement will be superseded upon adoption of the 9/10/1998 version of Reg I, 7.09(b) into the SIP</i></p> <p><i>Puget Sound Clean Air Agency Reg I, 7.09(b) (9/10/98) (State Only) This requirement shall become federally enforceable upon adoption into the SIP and will replace the 9/10/98/12/96 version of Reg I, 7.09(b)</i></p>	Boeing shall develop and implement an Operation and Maintenance Plan to assure continuous compliance with Puget Sound Clean Air Agency Regulations I, II, and III.	II.B Operation and Maintenance (O&M) Plan Requirements. This monitoring method supersedes the monitoring method for this requirement listed in I.A.11
EU 11.62	Puget Sound Clean Air Agency Reg I: 9.20(a) (6/88)	Maintain equipment in good working order that has received an NOC Order of Approval.	II.A.2(d)(vii) Vapor Degreasers Maintenance II.A.2(l) Vapor Degreaser Closed Cover II.A.2(m) Vapor Degreaser Hoist Speed II.A.2(n) Vapor Degreaser Air Blanket Center Temperature II.A.1(c) Facility Inspections
(e) Requirement Nos. EU 11.63 through 11.65 is the Order of Approval Nos. 9332.			
EU 11.63	Order of Approval No. 9332 (2/17/06) (22)	The vapor degreaser shall comply with the requirements of 40 CFR 63 Subpart T and WAC 173-460-060(5).	II.A.2(c) Documentation on File
EU 11.64	Order of Approval No. 9332 (2/17/06) (23)	The refrigerated freeboard chiller shall be operated whenever the vapor degreaser is in use.	II.A.2(d)(vii) Vapor Degreasers Maintenance

Reqmt. No.	Enforceable Requirement	Requirement Paraphrase (For Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)
EU 11.65	Order of Approval No. 9332 (2/17/06) (24)	Boeing shall inspect the vapor degreaser quarterly for leaks, determine if the cover is operating properly, completely covers the degreaser, is free of cracks, holes, and other defects, whether the high vapor cutoff thermostat is operating properly, and whether the vapor-up thermostat is operating properly and allows spray operation only after the vapor zone has risen to the design level.	II.A.2(d)(vii) Vapor Degreasers Maintenance II.A.2(l) Vapor Degreaser Closed Cover II.A.2(n) Vapor Degreaser Air Blanket Center Temperature II.A.1(c) Facility Inspections
(f) Requirement No. EU 11.66 is the RCW requirement to maintain Order of Approval equipment in good working order.			
EU 11.66	RCW 70.94.152(7) 1996 (State Only)	Maintain equipment that has received an Order of Approval Order of Approval in good working order.	II.A.2(d)(vii) Vapor Degreasers Maintenance II.A.1(c) Facility Inspections These monitoring methods supersede the monitoring method for this requirement listed in I.A.10
(g) Requirement No. EU 11.67 is the Puget Sound Clean Air Agency adoption of 40 CFR Part 63.			
EU 11.67	Puget Sound Clean Air Agency Reg III: 2:02 (7/13/00) (State Only)	Adopts 40 CFR 63 (12/02/94) by reference, and those requirements are listed elsewhere in this permit.	NMR

NMR = No Monitoring Required -- Monitoring is not required; however, if a noncompliant situation is observed, Boeing will initiate appropriate corrective action.

---

#### EXEMPTIONS, EXTENSIONS AND DETERMINATIONS GRANTED BY AGENCIES:

Source	Description
1. none	

---

#### **8. Add to the AOP the monitoring methods from the Boeing Renton AOP, specific to the vapor degreaser. This would be at the end of II.A.2(d).**

##### ***(x) Vapor Degreasers Maintenance***

*Note that additional vapor degreaser inspection requirements are identified in II.A.2(l) "Vapor Degreaser Closed Cover", II.A.2(m) "Vapor Degreaser Hoist Speed" and II.A.2(n) "Air Blanket Center Temperature", as applicable.*

*Boeing shall inspect the vapor degreasers for the following:*

- 1) Leaks: Once each month, except as provided under Section V.P Data recovery of this permit, inspect the vapor degreaser for leaks. Maintain records of the date of inspection, condition of the degreaser, and any deficiencies noted, and any corrective actions taken to correct deficiencies. Once eight consecutive month's worth of records indicating no deficiencies have been collected, inspections and recordkeeping may switch to quarterly. If leaks are observed, Boeing shall, as soon as practicable but within 24 hours of the initial observation correct the problem, shut down the unit or activity until it can be repaired, or report according to Section V.Q.5 Report of Problems not Corrected Within 24 hours. [WAC 173-460-060 (5)(b)(i)(8/21/98)]
- 2) Thermostat and Liquid level Controls: Once each year check for proper operation of the high vapor thermostat control, and the low liquid level control. If the high vapor thermostat control or the low liquid level control switches are not operating properly, Boeing shall, as soon as practicable but within 24 hours of the initial observation correct the problem, shut down the unit or activity until it can be repaired, or report according to Section V.Q.5 Report of Problems not Corrected Within 24 hours. [ WAC 173-460-060 (5)(a)(iv)(A)(8/21/98)]
- 3) Room Air Draft: Once each year monitor the steady draft above the degreaser, by the following method. Measure the air flow within 6 inches above the top of the freeboard area of the solvent cleaning machine using the following procedure. Determine the direction of the air flow by slowly rotating a velometer or similar device until the maximum speed is located. Orient a velometer in the direction of the wind current at each of the four corners of the machine. Record the reading for each corner. Average the values obtained at each corner and record the average wind speed.

If the average air flow is more than 15.3 meters per minute (50 fpm), Boeing shall, as soon as practicable but within 24 hours of the initial observation correct the problem, shut down the unit or activity until it can be repaired, or report according to Section V.Q.5 Report of Problems not Corrected Within 24 hours. [WAC 173-460-060 (5)(c)(v)(8/21/98)]
- 4) If Boeing corrects such problems as described above as soon as practicable but within 24 hours, Boeing does not need to report the deviation under Section V.M Compliance certifications or V.Q Reporting.

Failure to take corrective action as described above must be reported under Section V.M Compliance certifications or V.Q Reporting of this permit.  
[WAC 173-401-615(1)(b), 10/17/02]

## **9. Add these monitoring methods to II.A.2 of the AOP. These support NESHAP monitoring requirements**

### ***(p) Vapor Degreaser Closed Cover***

Boeing shall conduct a visual inspection monthly to determine if the cover is opening and closing properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes, and other defects. An exceedance of the Closed Cover occurs when the cover is found not to completely cover the cleaning machine opening when closed or has a crack, hole or other defect and is not corrected within 15 days of detection. If Boeing corrects the problem within 15 days of detection or shuts down the degreaser within 15 days of detection until it is repaired, Boeing does not need to report the problem under

Section V.M Compliance certifications or V.Q Reporting. [40 CFR 63.466(b)(1), 12/3/99]

***(q) Vapor Degreaser Hoist Speed***

Boeing shall determine the hoist speed monthly by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute). If after a year of monitoring, no exceedances of the hoist speed are measured, Boeing may begin monitoring the hoist speed quarterly. If an exceedance of the hoist speed occurs during quarterly monitoring, the monitoring frequency returns to monthly until another year of compliance without an exceedance is demonstrated. [40 CFR 63.466(c), 12/3/99; Puget Sound Clean Air Agency Regulation III Section 3.05 (b)(5)(D) 8/9/90]

***(r) Vapor Degreaser Air Blanket Center Temperature***

Boeing shall use a thermometer or thermocouple measure and shall record the temperature at the center of the air blanket during idling mode weekly. In accordance with 40 CFR 63.463(e) (6/23/03), an exceedance has occurred if the air blanket temperature exceeds 30% of the solvent's boiling point (except when one of the chillers is in defrost mode) and is not corrected within 15 days of detection. Thirty percent of the boiling point for trichloroethane is 49.5 degrees Fahrenheit. If Boeing corrects the problem within 15 days of detection or shuts down the degreaser within 15 days of detection until it is repaired, Boeing does not need to report the problem under Section V.M Compliance certifications or V.Q Reporting. [40 CFR 63.466(a)(1), 12/3/99; Puget Sound Clean Air Agency Regulation III Section 3.05 (b)(5)(E) 8/9/90]

**10. Delete NOC No. 5693. The building and spray booth have been demolished.**

<i>Order of Approval No. 5693</i>				
Requirement EU 2.125 is the Order of Approval permit condition that applies to PB0004 located in Bldg. 2-62				
EU 2.19	Order of Approval No. 5693 Condition No. 4 (12/13/94)	A robotic spray applicator equipped with 2 automated spray reciprocators shall be used to apply Radome coatings. For manual operations, HVLP spray equipment shall be used to apply Radome coatings.	H.A.1(e) Facility Inspections	H.A.1(d) Work Practice Inspection

**11. Add to EU 2, the NOC No. 9332.**

Reqmt. No.	Enforceable Requirement	Requirement Paraphrase (For Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Reference Test Method (See Section VIII)
<b><i>Order of Approval No. 9332</i></b>				
EU 2.135	Order of Approval No. 9332 Condition No.(3) (2/17/06)	Spray booth PPB-E1 and spray booth PPB-E13 shall be used for R&D purposes only.	II.A.1(d) Work Practice Inspection	
EU 2.136	Order of Approval No. 9332 Condition No.(4) (2/17/06)	The air exhausted from the spray booths shall be vented through Purolator Supersorb III filters or other filters that meet the requirements described in 40 CFR 63.745(g)(2)(ii)(A).	II.A.2(d)(iii) Spray Booths	
EU 2.137	Order of Approval No. 9332 Condition No.(5) (2/17/06)	Boeing shall install and maintain a gauge to measure the pressure drop across the exhaust filters of the spray booth and within 60 days of startup, shall mark the acceptable pressure drop range on or nearby the gauge or on a pressure drop log.	II.A.2(d)(iii) Spray Booths	
EU 2.138	Order of Approval No. 9332 Condition No.(6) (2/17/06)	Boeing shall log the pressure drop across the exhaust filter system of the spray booth at least once per calendar month during months when the spray booth is used.	II.A.2(d)(iii) Spray Booths	
EU 2.139	Order of Approval No. 9332 Condition No.(7) (2/17/06)	The dry filters shall be checked for proper seating and complete coverage over the exhaust plenum each time that a new pre-filter or secondary filter is installed.	II.A.2(d)(iii) Spray Booths	
EU 2.140	Order of Approval No. 9332 Condition No.(8) (2/17/06)	Boeing shall at the time of filter installation, check and record that the type of exhaust filters installed at this booth meet the requirements of 40 CFR 63.745(g)(2)(ii)(A).	II.A.2(d)(iii) Spray Booths	
EU 2.141	Order of Approval No. 9332 Condition No.(9) (2/17/06)	Boeing shall check to see that the pressure gauge functions properly and the pressure drop range is labeled on the log sheets at least quarterly.	II.A.2(d)(iii) Spray Booths	

Reqmt. No.	Enforceable Requirement	Requirement Paraphrase (For Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Reference Test Method (See Section VIII)
EU 2.142	Order of Approval No. 9332 Condition No.(10) (2/17/06)	Boeing shall use one of the high transfer efficiency spray coating methods when spray applying coatings. This includes high volume low pressure (0.1 to 10 psig air pressure for atomization), electrostatic, airless air assisted, and electrodeposition.	II.A.1(d) Work Practice Inspection	
EU 2.143	Order of Approval No. 9332 Condition No.(11) (2/17/06)	<p>Boeing may use alternative coating methods not identified in Condition 10, providing that:</p> <ul style="list-style-type: none"><li data-bbox="654 686 1217 746">(a) The alternative coating method is required for the test purpose; and</li><li data-bbox="654 777 1217 867">(b) The alternative is either (i) approved for an associated production activity at a Boeing facility, or (ii) a new method being tested, or</li><li data-bbox="654 897 1217 958">(iii) being used to apply a new coating being tested; and</li><li data-bbox="654 988 1217 1078">(c) The alternative coating method use activities are documented in a master list to include justification of the criteria in 11(a) and 11(b); and</li><li data-bbox="654 1109 1217 1250">(d) Operational records shall be maintained for each shift to identify when alternative coating methods were used and reference the justified activity it represents on the master list identified in 11(c).</li></ul>	II.A.1(d) Work Practice Inspection	

## **12. Revise list of locations in EU 10 Wood Furniture.**

### **Wood Furniture**

#### **DESCRIPTION:**

*This section consists of wood furniture manufacturing activities. These activities have been permitted under a Notice of Construction and/or are subject to 40 CFR Part 63 Subpart JJ. For the purpose of defining an emission unit in this permit, each piece of equipment listed below is considered a separate emission unit.*

<b>Bldg.</b>	<b>Col/Dr</b>	<b>MSS/ID#</b>	<b>Order of Approval</b>	<b>Date Installed</b>	<b>Source Description</b>
				#	
2-31					Facilities Carpentry Shop
2-88			N/A		Model Shop
3-365			N/A		<u>1. Carpentry shop, 2. Paint Booth</u>
2-10			N/A		Mechanical Systems Lab
<u>2-122</u>			<u>N/A</u>		<u>Carpentry shop</u>

**13. Revise the list of EU 2 equipment as shown below.**

<b>Bldg.</b>	<b>Col/Dr</b>	<b>MSS/ID#</b>	<b>Order of Approval</b>	<b>Date Installed</b>	<b>Source Description</b>	<b>Aerospace NESHP Coatings with Inorganic HAP Used in Unit?</b>
				#		
3-818	E1	PB5002	Reg.	1986	Spray Booth	Yes
3-370	D2	PB5001	5572	1994	Spray Booth	Yes
3-380	C13	PB5008	3560	1992	Spray Booth	Yes
3-369	P3	RV5004	Reg.	1986	Paint Hangar	Yes
3-369	P4	RV5003	Reg.	1986	Paint Hangar	Yes
3-380	P5	F50020	3560	1992	Paint Hangar	Yes
3-380	P6	F50021	3560	1992	Paint Hangar	Yes
3-365	A1	PB5004	2634	1985	4000 CFM Spray Booth*	No
<u>2-44</u>	<u>S4</u>	<u>PB0002</u>	<u>4358</u>	<u>1992</u>	<u>Dry filter Spray booth</u>	<u>Yes</u>
<u>2-62</u>	<u>D8</u>	<u>PB004</u>	<u>5693</u>	<u>1994</u>	<u>Wet Spray Booth*</u>	<u>No</u>
<u>2-62</u>	<u>C18</u>	<u>ROB0021</u>	<u>Reg.</u>	<u>1973</u>	<u>Wet Spray Booth #6*</u>	<u>No</u>
<u>2-62</u>	<u>C16</u>	<u>PB0016</u>	<u>Reg.</u>	<u>1973</u>	<u>Wet Spray Booth #5*</u>	<u>No</u>
<u>2-62</u>	<u>C14-15</u>	<u>PB0006/07</u>	<u>Reg.</u>	<u>1973</u>	<u>Wet Spray Booth #3, #4*</u>	<u>No</u>
<u>2-31</u>	<u>WJ10</u>	<u>PB0008</u>	<u>4371</u>	<u>1968</u>	<u>Dry filter Spray Booth*</u>	<u>No</u>
2-122	Q5	PB0018	4371	1992	Dry Filter Spray Booth*	No
<u>2-122</u>			<u>9332</u>	<u>2006</u>	<u>Dry Filter Spray Booths (2)</u>	<u>No</u>
2-88		PB9006	8051	2001	Dry Filter Spray Booth*	No

**14. Revise the list of EU 6 equipment as shown below.**

<b>Bldg.</b>	<b>Col./Dr.</b>	<b>MSS/ID#</b>	<b>Order of Approval #</b>	<b>Installed Date</b>	<b>Source Description</b>
2-88		DUC7460	8051	2000	Dust collector
3-369	Inside	DUC369	7165	1998	Dust collector

		<i>Door S6</i>				
2-49	<i>Outside</i>	DUC078	7391	1998	<i>Dust collector</i>	
	<i>W. Wall</i>					
2-49	VC18	GR0128	6120	1995	<i>Grind Booth, Dry Filter</i>	
3-818		DUC515	4677	1993	<i>Dust collector</i>	

## **15. Add an emission unit for the groundwater remediation unit near Building 2-81.**

**DESCRIPTION:** *This section includes all activities and equipment associated with the ground water treatment operations near Building 2-81*

<i>Bldg.</i>	<i>Order of Col./Dr.</i>	<i>Install Approval #</i>	<i>Date</i>	<i>Source Description</i>
2-81	<i>Outside</i>	8898	2004	<i>Air stripper</i>

<b>Reqmt. No.</b>	<b>Enforceable Requirement</b>	<b>Requirement Paraphrase (For Information Only)</b>	<b>Monitoring, Maintenance &amp; Recordkeeping Method (See Section II)</b>	<b>Reference Test Method (See Section VIII)</b>
-------------------	--------------------------------	--	--	---

Requirement Nos. EU 12.1 through EU 12.8, are the requirements in NOCOA No. 8898.

EU 12.1	Puget Sound Clean Air Agency NOC 8898. (11/26/2003) (3)	Boeing shall route all effluents through a two-stage carbon canister system followed by a permanganated/zeolite media before exhausting to the atmosphere.	NMR	
EU 12.2	Puget Sound Clean Air Agency NOC 8898. (11/26/2003) (4)	When the groundwater remediation system is operating in an open loop configuration (exhausting to the atmosphere), the flow rate through the carbon canisters and permanganated/zeolite media shall not exceed 180 cfm.	II.A.2.(c) Documentation on file	
EU 12.3	Puget Sound Clean Air Agency NOC 8898. (11/26/2003) (5)	Boeing shall operate the groundwater remediation system in an open loop configuration no more than 90 days per year.	II.A.2.(c) Documentation on file	
EU 12.4	Puget Sound Clean Air Agency NOC 8898. (11/26/2003) (6)	Boeing shall keep records of the days when the groundwater remediation system is operated in an open loop configuration and shall make these records available for review by PSCAA (Agency) personnel.	II.A.2.(c) Documentation on file	

Reqmt. No.	Enforceable Requirement	Requirement Paraphrase (For Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Reference Test Method (See Section VIII)
EU 12.5	Puget Sound Clean Air Agency NOC 8898. (11/26/2003) (7)	When the groundwater remediation system is operating in an open loop configuration, the concentration of trichloroethylene shall not exceed 2.7 ppmv in the post-treatment exhaust. The concentration of cis 1,2-dichloroethylene shall not exceed 1.9 ppmv in the post-treatment exhaust. The concentration of vinyl chloride shall not exceed 0.3 ppmv in the post-treatment exhaust. When any of these breakthrough concentrations are reached, Boeing shall shut down the system until the spent cartridges are replaced.	II.A.2.(c) Documentation on file	
EU 12.6	Puget Sound Clean Air Agency NOC 8898. (11/26/2003) (8)	If any point during the month the groundwater remediation system is operating in an open loop configuration, Boeing shall perform monthly monitoring to assure compliance with Conditions 4, 5, and 7, and shall keep records of the results than 2.7 ppmv trichloroethylene, 1.9 ppmv cis 1,2-dichloroethylene and 0.3 ppmv vinyl chloride for three consecutive monthly monitoring events.	II.A.2.(c) Documentation on file	
EU 12.7	Puget Sound Clean Air Agency NOC 8898. (11/26/2003) (10)	Boeing shall notify the Agency of the completion of this project within 60 days of the date when Boeing removes or permanently shuts down the remediation equipment.	NMR	
EU 12.8	Puget Sound Clean Air Agency NOC 8898. (11/26/2003) (11)	This Order of Approval No. 8898 cancels and supersedes Order of Approval No. 8898 dated November 4, 2003.	NMR	

## 16. Add an emission unit for combustion turbines at Building 3-368.

### DESCRIPTION:

*This section includes all activities associated with using the following combustion turbines: one Allison 501-D13, Serial No. 501392, one GE J47-15 Serial No. 047161, and one GE J47-15 Serial No. 047666.*

<u>Bldg.</u>	<u>Order of Approval #</u>	<u>Source Description</u>
3-368	8949	Allison 501-D13, Serial No. 501392
3-368	8949	GE J47-15 Serial No. 047161
3-368	8949	GE J47-15 Serial No. 047666

Reqmt. No.	Enforceable Requirement	Requirement Paraphrase (For Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Reference Test Method (See Section VIII)
Requirement Nos. EU 12.1 through EU 12.8, are the requirements in NOCOA No. 8898 outside bldg 2-66.				
EU 13.1	Puget Sound Clean Air Agency NOC 8949. (5/3/06) (3)	The hours of operations of the Allison 501-D13 turbine shall be limited to 1290 hours per 12 rolling month period. The hours of operations of the GE J47- 15 turbine shall be limited to 540 hours per 12 rolling month period.	II.A.2.(c) Documentation on file	
EU 13.2	Puget Sound Clean Air Agency NOC 8949. (5/3/06) (4)	Within 30 days of the end of each month, Boeing shall calculate and record the monthly hours of operation for each turbine and the total hours of operation for each turbine during the most recent 12 rolling month period. These records shall be made available to Puget Sound Clean Air Agency personnel upon request.	II.A.2.(c) Documentation on file	
EU 13.3	Puget Sound Clean Air Agency NOC 8949. (5/3/06) (5)	The emissions from the Allison 501-D13 turbine shall not exceed 30.8 pounds NOx per hour. The emissions from the GE J47-15 turbine shall not exceed 73.2 pounds NOx per hour.	II.A.2.(c) Documentation on file	
EU 13.4	Puget Sound Clean Air Agency NOC 8949. (5/3/06) (6)	Within 90 days after issuance of Order of Approval No. 8949, Boeing shall conduct a source test using EPA Method 20 (or equivalent method approved by the Puget Sound Clean Air Agency) in combination with a method used to determine flow, to determine the hourly NOx emissions from the Allison 501 -D13 turbine and the GE J47- 15 turbine while firing each turbine at the maximum continuous operating rate. Tests shall be conducted in compliance with Puget Sound Clean Air Agency Reg. I Section 3.07.	<u>Propose we omit this because the test will have been completed before the Renewed permit gets issued.</u>	EPA Method 20  Or equivalent method approved by PSCAA
EU 13.5	Puget Sound Clean Air Agency NOC 8949. (5/3/06) (7)	The Allison 501-D13 and GE J47-15 turbines shall combust only Jet A fuel.	II.A.2.(c) Documentation on file	
EU 13.6	Puget Sound Clean Air Agency NOC 8949. (5/3/06)(8)	The combustion exhaust from the Allison 501 -D13 and GE J47- 15 turbines shall be vented through unrestricted vertical stacks.	II.A.1.(c) Facility wide inspection	

## 17. Revise wording.

The following proposed changes, a ) through e), are the same as the changes made to the Boeing Everett permit in 2004.

a) Page 22, EU 2.14: Please change the requirement paraphrase to make it closer to the actual language in the rule. The existing requirement paraphrase implies that *any* startup, for example, is a relevant recordable event regardless of whether there were excess emissions or a failure to follow an applicable SSM Plan.

EU 2.14	40 CFR 63.10(b)(2) <u>(2/12/994/20/06)</u>	<del>NBF/Plant 2 shall maintain relevant records in accordance with the rule – e.g., maintain occurrence and duration of startups, malfunctions, exceedances, maintenance, corrective actions and all other relevant information specified in the rule to demonstrate compliance with applicable NESHAP. Boeing shall maintain relevant records of startups, shutdowns, malfunctions, maintenance, corrective actions, monitoring, measurements, and testing in accordance with the rule.</del>	NMR	
---------	---	---	-----	--

b) EU 2, Please change the monitoring method from NMR to II.A.1(d) Work Practice Inspection for the requirements listed below. The language in II.A.1(d) implies that this requirement should be monitored via work practice inspections.

EU 2.37	40 CFR 63.744(a)(3) (9/1/98)	<i>Handling and transfer of cleaning solvents must be conducted in a manner as to minimize spills.</i>	NMR II.A.1(d)	
EU 2.52	40 CFR 63.745(b) (12/8/00)	NBF/Plant 2 shall conduct handling and transfer of HAP-containing primers and topcoats in such a manner to minimize spills.	NMR II.A.1(d)	
EU 2.79	40 CFR 63.748 (9/1/95)	NBF/Plant 2 shall conduct handling and transfer of HAP-containing RCRA wastes in such a manner to minimize spills.	NMR II.A.1(d)	

c) Page 35, EU 2.79: Please change the language as shown. EU 3.20 exempts RCRA hazardous waste from the Aerospace NESHAP requirements and the term RCRA is not contained in the actual language of 63.748.

EU 2.79	40 CFR 63.748 (9/1/95)	NBF/Plant 2 shall conduct handling and transfer of HAP-containing RCRA wastes in such a manner to minimize spills. Boeing shall conduct handling and transfer of HAP-containing wastes in such a manner to minimize spills.	NMR <u>I.A.1(d)</u>
---------	---------------------------	---	------------------------

d) Page 110, Section IV: For clarification, please add “where applicable” to the introduction of Section IV.

#### ***IV. ACTIVITIES REQUIRING ADDITIONAL APPROVAL***

*Where applicable, NBF/Plant 2 shall file notification and obtain the necessary approval from the Puget Sound Clean Air Agency before conducting any of the following:*

e) Page 120, Section V.Q.1(b): Please add WAC 173-400-107(3) to the citations listed at the end of the paragraph to clarify that compliance with V.Q.1(b) is considered compliance with WAC 173-400-107(3).

*(b) Deviation Reports*

NBF/Plant 2 shall report to the Puget Sound Clean Air Agency any instances where it failed to promptly repair any defective equipment. [WAC 173-401-615(3)(b), 11/4/1993; WAC173-401-107(3)]