Statement of Basis
The Boeing Company – Boeing Auburn Facility
Administrative Amendment, February 27, 2020

1. Purpose of the Statement of Basis

This document summarizes the legal and factual bases for the permit conditions in the air operating permit to be issued to the Boeing Commercial Airplane Group's Auburn facility under the authority of the Washington Clean Air Act, Chapter 70.94 Revised Code of Washington (RCW), Chapter 173-401 of the Washington Administrative Code (WAC), and Puget Sound Clean Air Agency (previously known as Puget Sound Air Pollution Control Agency (PSAPCA)) 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's air emissions and provides a description of Boeing's activities, including a compliance history.

2. Source Description

2. 1 Why Boeing Auburn is an Air Operating Permit Source

The Boeing Auburn facility qualifies as a major source and is required to obtain an air operating permit because it has the potential to emit, in the aggregate, 10 tons per year or more of any hazardous air pollutant (HAP) or 25 tons per year or more of any combination of such HAPs and more then 100 tons per year each of nitrogen oxides (NOx) and volatile organic compounds (VOC). The major sources of emissions are from the use of solvents and coatings used to support cleaning and coating operations associated with aircraft assembly and manufacture.

2. 2 Emission Inventory

The emission inventory is listed in Attachment A. The attached emission inventory includes a breakdown of the total annual emissions listed by chemical name, CAS number, and the sources of the listed emissions.

The following table summarizes the emissions from Boeing Auburn over the last eight years. The information is presented in tons per year.

Pollutant	1993 Tons	1994 Tons	1995 Tons	1996 Tons	1997 Tons	1998 Tons	1999 Tons	2000 Tons
NOx	305	246	346	196	193	106	105	93
VOC	201	109	114	158	201	100	117	93
HAP	146	77	42	46	45	36	40	21
CO	25	21	28	21	20	42	41	40
SO_2	18	4	1	1	1	10	11	11
PM	2	2	2	46	31	27	26	27

2. 3 Process Description

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

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

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

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

3. Review of Permit Application

An air operating permit application was received by the Puget Sound Clean Air Agency from Boeing on June 7, 1995. The Puget Sound Clean Air Agency acknowledged that the application was complete in a letter to Boeing dated August 1, 1995.

4. Compliance History

Boeing Auburn has been inspected at least annually by the Puget Sound Clean Air Agency since 1986.

The compliance history for Boeing Auburn is summarized below. Notices of Violation (NOVs) and Compliance Status Reports (CSRs) are grouped by emission unit or other appropriate category. Within emission units or other categories they are listed in chronological order.

The Agency considers all of the compliance matters described in this document to be closed and there are no outstanding enforcement issues.

The Puget Sound Clean Air Agency has no record of receiving any odor or nuisance complaints regarding Boeing Auburn.

4. 1 Chrome Composite Mesh Pad Scrubber

The Puget Sound Clean Air Agency issued several Notices of Violation to Boeing for the improper operation of the composite mesh pad scrubber for the chromium electroplating tanks located in Building 17-07. The violations occurred during 1997 and the first part of 1998. During the time the violations occurred, Boeing Auburn was operating the chrome scrubber under General Regulatory Order No. 6787 dated January 9, 1997 and Order of Approval No. 4200 dated December 4 1991. On June 8, 1998, the Agency issued a revised Regulatory Order No. 6787 that cancelled and superceded Order of Approval No. 4200 conditions 4 and 5 and General Regulatory Order No. 6787 dated January 9, 1997. Boeing sent a letter to the Agency on July 29, 1998 stating that Boeing deactivated the hard chrome electroplating line that was subject to the chromium NESHAP rule 40 CFR 63.340- 63.347 on July 13, 1998. An Agency inspector verified that the equipment was taken out of service permanently during an on-site inspection conducted on August 6, 1998.

The Agency issued two sets of violations to Boeing Auburn for the improper operation of the chrome scrubber. The Agency issued the first set of violations, which included NOV Nos. 35334, 35335, 35336, and 36337 to Boeing for operating the scrubber outside of the established pressure drop range. The Agency issued the second set of violations, which included NOV Nos. 35349, 35350, 36751, and 36752 for the improper wash down of the second and third stages of the composite mesh pad scrubber.

A description of these notices of violation is as follows:

NOV No. 35334 issued for the failure to comply with Regulation III, Section 2.02 which states that it is unlawful for any person to cause or allow the operation of any source in violation of any provision of Part 61 or Part 63, Title 40 of the Code of Federal Regulations in effect July 1, 1997. Boeing violated the Chromium NESHAPS (40 CFR Part 63 Subpart N) by operating the composite mesh pad scrubber in Building 17-07 for thirty-nine consecutive days (from July 24, 1997-August 31, 1997) during the quarter of June, July, and August when the pressure differential was not in the compliant range of 4.2 inches to 7.8 inches of water pressure. The actual range was 8.0-9.2 inches of water pressure. The Agency received corrective action letters from Boeing regarding this matter on February 13, 1998 and March 20, 1998. On January 11, 1999, the Agency issued Civil Penalty No. 8896 citing NOV No. 35339, and the penalty and notice of violation were resolved through an Assurance of Discontinuance.

NOV No. 35335 issued for the failure to comply with Regulation I, Section 7.09(b). Regulation I Section 7.09(b) requires major sources such as Boeing Auburn to develop and implement an operations and maintenance plan to assure continuous compliance with Regulations I, II, and III. Boeing Auburn failed to implement the Operations and Maintenance plan by allowing the composite mesh pad scrubber to operate for 39 days outside of the compliant pressure drop range. The Agency received corrective action letters from Boeing regarding this matter on February 13, 1998 and March 20, 1998. On January 11, 1999, the Agency issued Civil Penalty No. 8896 citing NOV No. 35339, and

the penalty and notice of violation were resolved through an Assurance of Discontinuance.

NOV No. 35336 issued for the failure to comply with Regulation III Section 2.02 which states that it is unlawful for any person to cause or allow the operation of any source in violation of any provision of Part 61 or Part 63, Title 40 of the Code of Federal Regulations in effect July 1, 1997. Boeing violated the Chromium NESHAPS by operating the composite mesh pad scrubber in Building 17-07 for nine consecutive days (from September 1, 1997- September 9, 1997) during the quarter of September, October, and November when the pressure differential was not in the compliant range of 4.2 inches to 7.8 inches of water pressure. The actual range was 9.2 to 9.4 inches of water pressure. The Agency received corrective action letters from Boeing regarding this matter on February 13, 1998 and March 20th, 1998. On January 11, 1999, the Agency issued Civil Penalty No. 8896 citing NOV No. 35339, and the penalty and notice of violation were resolved through an Assurance of Discontinuance.

NOV No. 35337 issued for the failure to comply with Regulation I Section 7.09(b). Regulation I Section 7.09(b) requires major sources such as Boeing Auburn to develop and implement an operations and maintenance plan to assure continuous compliance with Regulations I, II, and III. Boeing Auburn failed to implement the Operations and Maintenance plan by allowing the composite mesh pad scrubber to operate for 9 days outside of the compliant pressure drop range.

The Agency received corrective action letters from Boeing regarding this matter on February 13, 1998 and March 20th, 1998. On January 11, 1999, the Agency issued Civil Penalty No. 8896 citing NOV No. 35339, and the penalty and notice of violation were resolved through an Assurance of Discontinuance.

NOV No. 35349 issued to Boeing for the failure to comply with Regulation III Section 2.02 which states that it is unlawful for any person to cause or allow the operation of any source in violation of any provision of Part 61 or Part 63, Title 40 of the Code of Federal Regulations effect July 1, 1997. Boeing violated the Chromium NESHAPS by failing to wash the second stage of composite mesh pad scrubber in Building 17-07 according to the manufacturer's specifications (one time per hour for 15 to 30 seconds duration). Boeing failed to conduct the proper wash down cycle on the second stage for 130 consecutive days from September 15, 1997 through and including January 22, 1998. On June 17, 1998 the Agency received a corrective action letter from Boeing regarding this matter. The Agency issued Civil Penalty No. 8896 on January 11, 1999, citing Notices of Violation Nos. 35349, 35350, 36751, and 36752, in the amount of $96,000. Civil Penalty No. 8896 was resolved through an Assurance of Discontinuance. The Agency closed these Notices of Violation with a letter to Boeing dated February 9, 1999 acknowledging receipt of the full payment of $25,000.00 for Civil Penalty No. 8896.

NOV No. 35350 issued to Boeing for the failure to comply with Regulation III Section 2.02 which states that it is unlawful for any person to cause or allow the operation of any source in violation of any provision of Part 61 or Part 63, Title 40 of the Code of Federal Regulations effect July 1, 1997. Boeing violated the Chromium NESHAPS by failing to wash the third stage of composite mesh pad scrubber in Building 17-07 according to the manufacturer's specifications. Boeing failed to conduct the proper wash down cycle on

the third stage for 29 consecutive days from December 24, 1997 through and including January 22, 1998. No wash down of the third stage of the scrubber was occurring during this time. On June 17, 1998 the Agency received a corrective action letter from Boeing regarding this matter. On June 17, 1998 the Agency received a corrective action letter from Boeing regarding this matter. The Agency issued Civil Penalty No. 8896 on January 11, 1999, citing Notices of Violation Nos. 35349, 35350, 36751, and 36752, in the amount of $96,000. Civil Penalty No. 8896 was resolved through an Assurance of Discontinuance. The Agency closed these Notices of Violation with a letter to Boeing dated February 9, 1999 acknowledging receipt of the full payment of $25,000.00 for Civil Penalty No. 8896.

NOV No. 36751 issued to Boeing for the failure to comply with Regulation I Section 7.09(b). Regulation I Section 7.09(b) requires major sources such as Boeing Auburn to develop and implement an operations and maintenance plan to assure continuous compliance with Regulations I, II, and III. Boeing Auburn failed to implement the Operations and Maintenance plan by allowing the improper wash down of the second stage of the composite mesh pad scrubber for 130 consecutive days, from September 15, 1997 through and including January 22, 1998. On June 17, 1998 the Agency received a corrective action letter from Boeing regarding this matter. On June 17, 1998 the Agency received a corrective action letter from Boeing regarding this matter. The Agency issued Civil Penalty No. 8896 on January 11, 1999, citing Notices of Violation Nos. 35349, 35350, 36751, and 36752, in the amount of $96,000. Civil Penalty No. 8896 was resolved through an Assurance of Discontinuance. The Agency closed these Notices of Violation with a letter to Boeing dated February 9, 1999 acknowledging receipt of the full payment of $25,000.00 for Civil Penalty No. 8896.

NOV No. 36752 issued to Boeing for the failure to comply with Regulation I Section 7.09(b). Regulation I Section 7.09(b) requires major sources such as Boeing Auburn to develop and implement an operations and maintenance plan to assure continuous compliance with Regulations I, II, and III. Boeing Auburn failed to implement the Operations and Maintenance plan by allowing the improper wash down of the third stage of the composite mesh pad scrubber for 29 consecutive days, from December 24, 1997 through and including January 22, 1998. On June 17, 1998 the Agency received a corrective action letter from Boeing regarding this matter. On June 17, 1998 the Agency received a corrective action letter from Boeing regarding this matter. The Agency issued Civil Penalty No. 8896 on January 11, 1999, citing Notices of Violation Nos. 35349, 35350, 36751, and 36752, in the amount of $96,000. Civil Penalty No. 8896 was resolved through an Assurance of Discontinuance. The Agency closed these Notices of Violation with a letter to Boeing dated February 9, 1999 acknowledging receipt of the full payment of $25,000.00 for Civil Penalty No. 8896.

4. 2 Solvent handling to minimize the emission of Volatile Organic Compounds

Since 1995, the Agency issued two notices of violation to Boeing Auburn regarding its solvent handling work practices. One involved the failure to store a solvent rag in a closed container and the other involved storing a volatile organic compound (paint) in an open container.

A description of these notices of violation is as follows:

NOV No. 35314 issued to Boeing for a violation of Regulation II Section 3.09 (e) for the failure to enclose a solvent rag in Building 17-56 column A-19. The Agency received a corrective action letter from Boeing Auburn regarding this matter on February 21, 1997. On April 24, 1997, the Agency issued Civil Penalty No. 8641 for $1,000.00. Boeing Auburn submitted an application for remission or mitigation on May 12, 1997 stating that the rag was not tended for disposal and that it was placed temporarily while the employee was on break. On October 13, 1997, the Agency and Boeing executed a settlement agreement whereby Boeing would pay $100.00 and Civil Penalty No. 8641 would be resolved. On January 5, 1998, the Agency sent a letter to Boeing acknowledging the receipt of the payment of $100.00 and the closure of NOV No. 35314.

NOV No. 35346 issued to Boeing for a violation of Regulation II Section 3.09e. This section prohibits the use of open containers for the storage or disposal of VOC containing materials. Boeing failed to store or dispose of VOC containing material in closed container by Storing BMS 10-20 in an open container in a spray booth (Order of Approval No. 7279 MSS/ID# 12355) in Building No. 17-07 on April 20,, 1998. Boeing Auburn submitted corrective action responses on April 30, 1998 and on December 9, 1998. The Agency issued a case closure letter to Boeing Auburn on December 16, 1998.

4. 3 Boiler Continuous Emission Monitoring

From 1995 until 1998, Boeing Auburn operated a natural gas boiler rated at 196 million BTU per hour. Order of Approval No. 4899 Condition No. 4 dated May 12th 1995 required Boeing to equip the boiler with a continuous emission monitoring system and to maintain the CEMs, collect the data, and report the data according to the requirements in Regulation I, Article 12. The Agency issued two Notices of Violation to Boeing during that time for failing to meet the data capture requirements in Regulation I, Section 12.02. As a result of these violations, Boeing Auburn submitted a Notice of Construction Application to the Agency to de-rate the boilers from 196 million BTUs per hour to 95 million BTUs per hour. On May 29, 1998, the Agency issued Order of Approval No. 7271 allowing Boeing to de-rate the boiler and remove the continuous emission monitoring system.

A description of these Notices of Violation is as follows:

NOV No. 35330 issued to Boeing for violating Regulation I, Section 12.02(c) by failing to continuously monitor nitrogen dioxide emissions from the Boiler No. 4 in Building 17-09. The date of violation was February 15, 1997. The violation was based on a February CEM report from Boeing Auburn dated March 17, 1997. On October 14, 1997 the Agency issued a case closure letter to Boeing stating that the February 15, 1997 event was excusable.

NOV No. 35332 issued to Boeing for violating Regulation I, Section 12.02(c) by failing to continuously monitor Nitrogen Dioxide emissions from Boiler No. 4 in Building 17-09. The date of violation was October 18, 1997 based on the October CEM report dated November 25, 1997. On December 4, 1997, the Agency issued a case closure letter to Boeing stating that the violation was excusable.

4. 4 Aerospace NESHAP

The Notices of Violations and Compliance Status Reports issued by the Agency to Boeing Auburn regarding the Aerospace National Emission Standards for Hazardous Air Pollutants and related requirements are described as follows:

CSR dated August 24, 1999 issued to Boeing based on an April 26, 1999 six-month Aerospace NESHAP compliance status report. The six-month report is required pursuant to 40 CFR 63.9(h) and 63.753(a). The CSR was issued for the following deficiencies:

- An open solvent container
- A missed dry filter spray booth pressure drop reading
- Inadequate water flow in a water wash spray booth

Boeing reported its corrective action in the April 26, 1999 report. The CSR dated August 24, 1999 closed the case.

NOV No. 36619 for the period September 1, 1998 through January 20, 1999 issued to Boeing Auburn for failing to immediately shut down spray coating operations when the recorded pressure drop or water flow rate was not in the established operating range. Boeing violated Regulation I, Section 9.20 by failing to maintain and operate equipment in good working order. Additionally, Boeing violated Regulation III, Section 2.02 by causing a violation of the Aerospace NESHAP, specifically 40 CFR 63.745(g). The six-month notification of compliance status report was dated April 26, 1999. The report is required pursuant to 40 CFR 63.9(h) and 63.753(a). In the report, Boeing listed deficiencies occurring between September 1, 1999 and February 28, 1999. Boeing reported 8 instances of the pressure drop being out of range on dry filter spray booths and 15 instances of the water flow rates outside of the established range in water wash booths and operations were not immediately shut down. Boeing submitted corrective action letters to the Agency dated September 9, 1999, October 12, 1999, and March 28, 2000 regarding this matter. On June 1, 2000, the Agency issued an amended Civil Penalty No. 9098 for $32,000.00. On August 16, 2000, the Agency sent a letter to Boeing acknowledging the full payment of the $32,000.00 for Civil Penalty No. 9098 and closing NOV No. 36619.

CSR dated May 8, 2001 for no deficiencies issued to Boeing based on no self-reported violations in the Aerospace NESHAP semi-annual report dated March 13, 2001 for the reporting period July 14, 2000 though January 13, 2001.

CSR dated November 9, 2001 based on self-reported violations in a semi-annual Aerospace NESHAP report dated October 30, 2001 for the period March 1, 2001 through August 31, 2001. Boeing reported a total of four missed pressure drop readings for the Building No. 17-68 dry filter booth (Order of Approval No. 3587, MSS/ID#MSS/ID#MSS/ID# 59271) and one missed pressure drop reading for the Building No. 17-07 booth (Order of Approval No. 7279, mss# 12355,). The CSR was closed on the November 9, 2001 CSR based on the corrective action Boeing reported in the October 30, 2001 report.

CSR dated November 9, 2001, for no deficiencies on the semi-annual Aerospace NESHAP report for the topcoat improvement booth in Building 17-45, Order of Approval No. 7941 (6 month Period March 3, 2001 to August 31, 2001) and the annual report for period September 1, 2000 through August 31, 2001.

CSR dated December 24, 2001 for no deficiencies on the semi-annual Aerospace NESHAP report for the new spray gun cleaning operation in Building 17-45. The reporting period was from April 16, 2001 through October 15, 2001. The NESHAP report was dated December 10, 2001. The paint booth in which the spray gun cleaning operation is located was permitted by the Agency under Order of Approval No. 7639.

CSR dated December 24, 2001 for no deficiencies regarding a December 10, 2001 NESHAP annual and semiannual report for the manual spray paint booth, Order of Approval No. 8506 in the 17-45 building. The semi-annual reporting period was from April 29, 2001 through October 28, 2001. The annual reporting period was from October 29, 2000 through October 28, 2001.

CSR dated January 17, 2002 replaced the CSR dated December 24, 2001. A correction was made. The report dated December 10, 2001 was an initial notice of compliance status for the Aerospace NESHAP regarding a new spray gun cleaning operation in building No. 17-68. The spray paint booth in which the gun cleaning operation is located was permitted by the Agency under Order of Approval No. 7639. Boeing Auburn reported no deficiencies with the applicable standards for the reporting period April 16, 2001 through October 15, 2001.

CSR dated May 7, 2002 for no deficiencies regarding the April 25, 2002 annual and semi-annual NESHAP reports for the Auburn facility. The semi-annual reporting period was from September 1, 2001 through February 28, 2002. The annual reporting period was from March 1, 2001 through February 28, 2002.

CSR dated June 18, 2002 for semiannual report dated June 3, 2002 for new gun cleaning operation in Building 17-68 under NOC Order of Approval 7639. Case closed June 18, 2002 because no deficiencies were found.

Written Warning 2-006640 dated October 30, 2002 for information in semiannual report dated October 30, 2002. Boeing reported use of nonexempt cleaning solvent, MEK < 1 oz. in Building 17-62, 40 CFR 63.753(b)(1)(i). Also reported missing pressure drop reading Spray Booth 12355, Building 17-07, on May 7, 2002. Case closed because Boeing provided corrective action in the October 30, 2002 report.

CSR dated November 21, 2002 for semiannual report for spray gun cleaning operation in booth permitted under Order of Approval 7639. No deficiencies noted and case closed.

4. 5 Other Issues

NOV No. 31590 issued to Boeing Auburn on June 28, 1995 for a violation of Regulation I, Section 6.09(b) for the failure to meet the conditions of Order of Approval No. 5567 Condition No. 5. Boeing failed to install a static pressure differential gauge to measure the pressure drop across the scrubber. The corrective action order on the NOV ordered Boeing to install the gauge by August 1, 1995. On July 12, 1995, Boeing submitted a corrective action letter to the Agency. On July 28, 1995, Boeing submitted another corrective action letter stating that the gauge was successfully installed on July 12, 1995. The Agency issued a case closure letter to Boeing dated September 15, 1995.

CSR dated August 24, 1999 based on information in an April 26, 1999 semi-annual Aerospace NESHAP report listing three self-reported violations:

- A missed pressure drop reading in a dry filter spray booth
- An open VOC container
- Inadequate water flow in a water wash curtain

The Agency closed the CSR on the same document based on the corrective action provided by Boeing in the semi-annual report.

CSR dated August 17, 1999 issued to Boeing during a compliance inspection for a violation of Regulation I, Section 9.20, failure to operate and maintain equipment in good working order. Boeing allowed the operation of an AA Tank Line scrubber No. 2, MSS/ID#55147, in Building 17-45 with a leaking stack. Boeing submitted corrective action responses dated September 23, 1999, October 1, 1999, and October 27, 1999 regarding this matter. The Agency closed the CSR based on the corrective action taken by Boeing.

CSR dated February 25, 1998 issued to Boeing for three deficiencies as described below:

- Torit dust collector, in Building 17-06, pressure differential outside of range per Order of Approval No. 6777. The acceptable pressure differential range was 1.5-3.0 inches of water. The actual pressure differential was 1.0 inches of water.
- Dust Vent Dust Collector in Building No. 17-07, Order of Approval 7183, cited for Regulation I, Section 9.15(a). An Agency inspector observed dust on top of collector barrel of the baghouse.
- Spraying a temporary protective coating greater than the 1% VOC limit established in Order of Approval No. 6756.

Boeing submitted a corrective action letter addressing the three deficiencies on March 11, 1998. The Agency closed the CSR based on the letter.

CSR dated May 23, 2002 during an inspection for out of range scrubber flow rate on chemical mill scrubber in Building 17-45 MSS No. 60036, NOC Order of Approval No. 8029, Condition 8. Corrective action letter submitted June 21, 2002 and case closed.

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 the Puget Sound Clean Air Agency has determined to be within the scope of the definition of “applicable requirements” under the operating permit program. Boeing 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).

Applicable requirements that are not ongoing are not included in the permit because they are not in effect during the term of the permit (a.k.a. “obsolete”).

5. 1 Applicable Requirements

Boeing is subject to all the requirements listed in all the tables contained in Section I of the permit. Section I.A. contains the requirements that are applicable facility-wide. The Puget Sound Clean Air Agency 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. Section I.B. contains the Emission Unit Specific Applicable Requirements and Section I.C. contains Operations without Specific Applicable Requirements. 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.

The tables in Section I.A list the citation for the "applicable requirement" in the second column. The third column, "Date," contains the adoption or effective date of the requirement. In some cases, the effective dates of the "Federally Enforceable Requirement" and the "State Only Requirement" may be different because only rules approved by EPA through Section 110, 111, and 112 of the federal Clean Air Act are federally enforceable and either the state has not submitted the regulation to the EPA or the EPA has not approved it.

The first column is used as an identifier for the requirement, and the fourth "Requirement Paraphrase" column paraphrases the requirement. The first and fourth columns are for information only and are not enforceable conditions of this permit. The actual enforceable requirement is embodied in the requirement cited in the second and third columns.

The fifth 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 sixth column, "Emission Standard Period," identifies the averaging time for the emission standard and/or the minimum length of one reference method run. Section V.N.1 of the permit identifies the number of separate runs for determining compliance using the reference method. The last 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.

The permit identifies a specific method and the adoption date. Puget Sound Clean Air Agency 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 Puget Sound Clean Air Agency Board of Directors. 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.

In case of conflict or omission between the information contained in the fourth column and the actual statue 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 and third columns, refer to the actual requirements cited.

Recently amended Puget Sound Clean Air Agency Regulations. The Puget Sound Clean Air Agency Board of Directors has recently amended several sections of its regulations. These amended sections are listed as "State Only" in the permit. That means they are not federally enforceable. They are enforceable only by Puget Sound Clean Air Agency and the Washington State Department of Ecology. However, these requirements will become federally enforceable if they are adopted in the SIP[1].

5. 2 Section I. A. (Facility-Wide)

5. 2. 1. Requirement I.A.1

Both WAC 173-400-040(1) and Puget Sound Clean Air Agency Regulation I, Section 9.03 standards are 20% opacity and apply to all stationary sources. Although the permit lists all these requirements together, Boeing must comply with each.

- The monitoring method is based on visible emission inspections of the facility at least once per calendar quarter, complaint response, and quarterly facility wide inspections. Inspections are to be performed while the facility is in operation during daylight hours. If during a quarterly visible emissions inspection 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, take certain prescribed actions. Similarly, if Boeing receives a complaint about visible emissions or opacity or identifies a problem during a facility wide inspection, Boeing must deal with the problem according to the appropriate monitoring requirement. The actions include: 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,

- Determine the opacity using the reference test method, or

- Continue the observation for a minimum of 15 minutes, or until visible emissions have been observed for a total of 45 seconds, whichever is a shorter period. 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

[1] "SIP" is an abbreviation for "state implementation plan" which is a plan for improving or maintaining air quality and complying with the Federal Clean Air Act. The Federal Clean Air Act requires states to submit these plans to the US EPA for its review and approval. This plan must contain the rules and regulations of the state agency or local air authority necessary to implement the programs mandated by Federal law. Once the EPA adopts the plan or elements of it, the plan and its requirements become "federally enforceable" by EPA. New or modified state or local rules are not federally enforceable until they are "adopted into the SIP" by the EPA.

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;

- Take corrective action, which may include shutting down the unit or activity until it can be repaired, until there are no visible emissions; or,

- Alternatively, determine the opacity using the reference test method.

Failure to take actions as described above must be reported under Section V.M. Compliance or V.Q. Reporting of this permit.

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

Boeing argued that the original wording would require Boeing to make daily Method 9 observations on any unit that often had visible emission, yet complied with all applicable requirements. The Puget Sound Clean Air Agency agrees that if Ecology Method 9A demonstrated compliance, additional monitoring would not be necessary to demonstrate compliance with the opacity requirements until the next required monitoring.

1) Compliance. None of the emission units at Boeing Auburn normally have visible emissions. The emission units are also unlikely to generate visible emissions except under the most unusual circumstances. These boilers have specific opacity monitoring requirements elsewhere in the permit (Section I.B.5). In addition, the Puget Sound Clean Air Agency has inspected this facility at least annually since 1986and has not identified opacity issues, nor has Boeing. Therefore, we conclude that it is generally in compliance with the opacity requirement and the margin of compliance is large. In addition, the monitoring method is designed so that Boeing will take corrective action before a violation occurs, further enhancing the compliance margin.

2) Variability of process and emissions. None of the processes at Boeing Auburn normally emit visible emissions, except as noted above. While many of the processes are variable or batch operations, the most likely cause of visible emissions would be a significant change in the process, one that would require approval from the Puget Sound Clean Air Agency, or major equipment failure. The specific emission units that are most likely to fail and have significant visible emissions, such as the boilers and baghouses, are addressed elsewhere in the permit.

3) Environmental impacts of problems. Observed opacity is generally related to emissions of particulate matter or finely divided liquid droplets. The manufacturing activities at Boeing typically do not generate significant quantities of particulate matter. Hence, the environmental impacts of the emissions are small especially considering the amount of land on which the facility is located. A maintenance problem is unlikely to result in emissions that would have a significant environmental impact.

4) Technical considerations. The emission units that are likely to generate visible emissions are addressed elsewhere in the permit.

Emergency Generators

Boeing Auburn has several diesel generators that are used for backup and fire suppression. These generators are normally tested monthly. Boeing also uses some of the generators for backup electricity while the primary system is undergoing maintenance, Boeing call this vault cleaning. 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 observes visible emissions from an emergency generator or generator for fire suppression pumps, Boeing shall check to make sure that the generator is operated and maintained in accordance with its Operations and Maintenance Plan or manufacturer's recommended maintenance procedures and either shut it down within 3 hours or observe visible emissions using WDOE Method 9A within 30 days of seeing the visible emissions; WDOE Method 9A test does not need to be repeated again if the unit is only operated less than 100 hours in the calendar year in which the visible emissions were observed. One hundred hours was chosen because these units at Boeing Auburn seldom operated more than 100 hours per year. The amount of emissions are small compared to the emissions from the diesel truck that brings supplies to the site and taken products from the site.

Boeing has also requested clarification as to whether the emergency provisions of WAC 173-401-645 would apply to the opacity from emergency generators. The Puget Sound Clean Air Agency concluded that the general opacity limits are "technology-based emission limitations" as they relate to emergency generators. Therefore, Boeing could use 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.2

Puget Sound Clean Air Agency Regulation I, Section 9.09 limits particulate emissions to 0.05 gr/dscf from equipment used in a manufacturing process. WAC 173-400-060 limits particulate emissions to 0.1 gr/dscf from general process units (i.e., units using a procedure or a combination of procedures for the purpose of causing a change in material by either chemical or physical means, excluding combustion).

The monitoring method is based on quarterly visual inspections of the facility for visible emissions, complaint response, and facility wide inspections. Opacity monitoring is a surrogate to performing a Method 5 test with Boeing taking corrective action if any visible emissions are noted. As with Requirement I.A.1, the Puget Sound Clean Air Agency has determined through its inspections and permitting that it is unlikely that Boeing Auburn will have any visible emissions or exceed the particulate limit. Recording of visible emissions is not necessarily a deviation of the particulate concentration standard because the threshold for observing visible emissions occurs at a particulate concentration of less than 0.05 gr/dscf. However, failure to take timely corrective action, as defined in the permit, is a deviation from the specific permit requirement and must be reported to the Puget Sound Clean Air Agency. Taking corrective action does not relieve Boeing from the obligation to comply with the particulate concentration standard itself. The Puget Sound Clean Air Agency has determined that the monitoring should be quarterly for the reasons listed above in Section 5. 2. 2.

5. 2. 3. Requirement I.A.3

Puget Sound Clean Air Agency Regulation I, Section 9.09 also limits particulate emissions to 0.05 gr/dscf corrected to 7% oxygen from fuel burning equipment (i.e., equipment that produces hot air, hot water, steam, or other heated fluids by external combustion of fuel) combusting natural gas. WAC 173-400-050(1) limits particulate emissions to 0.1 gr/dscf corrected to 7% O_2 from all combustion units (i.e., units using combustion for steam production or other process requirements, excluding open burning). Boeing burns only pipeline grade natural gas and fuels that are certified to comply with the fuel oil standards of Regulation I, Section 9.08. It can be shown, as in Section 5. 2. 4 for SO_2, that if fuels are properly burned, Boeing is incapable of violating this standard while complying with the other requirements. Improper fuel burning that would result in high particulate emissions would also cause opacity problems and would be detected by the opacity monitoring requirement, complaint response, or facility wide inspections..

The State Implementation Plan (SIP) identifies the effective date of WAC 173-400-050 and WAC 173-400-060 as August 20, 1993; however, the versions that were in effect on August 20, 1993 became effective on March 22, 1991.

5. 2. 4. Requirement I.A.4

Puget Sound Clean Air Agency Regulation I, Section 9.07 and WAC 173-400-040(6) are equivalent requirements (SO_2 emissions not to exceed 1000 ppmv), except for the second paragraph of the WAC, which is not in the Puget Sound Clean Air Agency 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 1000 ppm. Since the Puget Sound Clean Air Agency's rules are more stringent, this exception is not available to Boeing and the second paragraph does not apply to Boeing.

Boeing burns only pipeline grade natural gas in all combustion emission units except Boilers 1, 2, and 3 and back-up emergency generators which can burn diesel fuel.

All the natural gas burned at Boeing Auburn must be pipeline quality, the contents of which the Washington Utilities and Transportation Commission regulates to contain less than 2000 grains of sulfur per million cubic feet. 2000 grains of sulfur per million cubic feet is equivalent to approximately 3.4 parts of sulfur per million cubic feet of natural gas, as shown in the following calculation:

$$\frac{2{,}000\,gr\,S}{1{,}000{,}000\,ft^3\,nat.gas}\times\frac{1lb}{7000\,gr}\times\frac{385\frac{ft^3}{mole\,S}}{32\frac{lb}{mole\,S}}=3.44\times10^{-6}\,\frac{ft^3\,S}{ft^3\,nat.gas}\equiv3.44\ ppmdv\,S$$

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

$$3.44\times10^{-6}\frac{ft^3\,S}{ft^3\,nat.gas}\times\frac{1\,ft^3\,SO_2}{1\,ft^3\,S}\times\frac{1\,ft^3\,nat.gas}{11\,ft^3\,stack\,exhaust}=3.13\times10^{-7}\frac{ft^3\,SO_2}{ft^3\,stack\,exhaust}$$

This is equivalent to 0.31 ppmdv SO_2. Note that this estimated value is less than one-tenth of one percent of the 1,000 ppm SO_2 standard. Therefore, it is reasonable to assume that combustion units that are fired on natural gas cannot exceed the 1,000 ppm SO_2 limits in Puget Sound Clean Air Agency Regulation I, Section 9.07 and WAC 173-400-040(6). The other emission units are not capable of generating SO_2 emissions as permitted. Therefore, the permit does not contain additional monitoring requirements for the natural gas usage. Similarly it can be shown that burning diesel fuel also results in emissions below 1000 ppm.

5. 2. 5. Requirement I.A.5

Puget Sound Clean Air Agency Regulation I, Section 9.11 and WAC 173-400-040(5) are similar requirements that address emissions that may be environmentally detrimental or cause a nuisance. Although the permit lists all these requirements together, Boeing must comply with each. The monitoring method for all is based on responding to complaints and general inspections of the facility to identify any emissions that are likely to be injurious to human health, plant or animal life, or property, or that unreasonably interfere with enjoyment of life and property. For the following reasons, the Puget Sound Clean Air Agency has determined that the quarterly facility inspections required in Section II.A.1(c) of the permit are sufficient to monitor for changes that would cause a fugitive emission or unexpected buildup of dust on the roadways and plant grounds. The facility inspection shall include a representative sample each quarter but that representative sample should not be the same each quarter.

1) Initial compliance. The Puget Sound Clean Air Agency has not received any complaints concerning Boeing Auburn regarding fugitive dust or odor emissions over the past five years and has not observed visible or odorous emissions from plant activities during any inspection, nor has Boeing; therefore, the Agency concludes that it is generally in compliance with the nuisance requirements.

2) Margin of compliance. Because the Agency has not observed nuisance problems, and the fact that the current operations are unlikely to cause nuisance problems, the Puget Sound Clean Air Agency has determined that the margin of compliance is sufficient to only require quarterly checks and response to complainants as necessary. The emission of fugitive dust or odor is unlikely to generate off-site fallout or complaints except under the most unusual circumstances.

3) Variability of process and emissions. Boeing does not have emission units that are likely to generate emissions that would cause a nuisance. In addition, Boeing is unlikely to install such emission units during the life of the permit.

4) Environmental impacts of problems. Nuisance emissions can cause personal discomfort; however, by their nature do not result in exceedances of federal emissions or ambient standards. By responding quickly to complaints and identifying problems before they cause complaints, the environmental impact of nuisances should be small.

5) Technical considerations. Catastrophic failures of one of the boilers, a large dust collector, or spray booth, are the only likely causes of a nuisance causing a deviation at Boeing Auburn. Boilers at Boeing Auburn are fueled on natural gas (except Boilers 1, 2, and 3 and back-up emergency generators which can burn diesel fuel) and in accordance with an acceptable O&M plan, thereby minimizing the probability of any nuisance emission. The dust collectors and spray booths are equipped with high efficiency filters and are monitored at least monthly or quarterly by Boeing, thereby minimizing the chance of generating emissions that may cause a nuisance. The permit requires Boeing to both look for possible nuisances on a regular basis and handle upset emissions of nuisance causing particulate or odor bearing contaminants more frequently on an as-needed basis. This minimizes the probability of causing an emission that could be injurious to health, plant or animal life, or property; or that unreasonably interferes with the enjoyment of life and property. The monitoring method is designed so that Boeing will take corrective action before a violation occurs. In addition, in the past five years the Puget Sound Clean Air Agency has not noted nor received complaints about Boeing causing emissions that are likely to be injurious to health, plant or animal life, or property or that unreasonably interfere with enjoyment of life and property. Therefore, the Puget Sound Clean Air Agency has determined that quarterly monitoring is adequate. Receiving complaints does not necessarily mean Boeing is in violation of this requirement, but Boeing has a responsibility to investigate complaints and take corrective action if necessary. Failure to take timely corrective action, as defined by the monitoring method, is a deviation of the specific permit term. Taking corrective action does not relieve Boeing from the obligation to comply with the nuisance requirement itself.

5. 2. 6. Requirements I.A.6 through I.A.8

The fugitive dust requirements are in I.A 6 through I.A.8 and addressed in Regulation I, Section 9.15 and WAC 173-400-040(3). The Puget Sound Clean Air Agency Board of Directors made significant revisions to Regulation I, Section 9.15 on March 11, 1999. The amended version will be forwarded to EPA as a SIP amendment. Upon approval of the SIP changes, the revised version of Regulation I, Section 9.15 will be federally enforceable, and the old version will no longer apply. The revised rule requires the use of reasonable precautions for fugitive dust. The Agency has included both versions of Section 9.15 because they are significantly different. The Monitoring, Maintenance, and Recordkeeping Methods are the same as those listed in I.A.6 through I.A.8.

The SIP version of Puget Sound Clean Air Agency Regulation I, Section 9.15 requires best available control technology (BACT) for all fugitive dust, limits vehicle dust track-out, and limits fugitive dust from manufacturing and control equipment. The current version of Section 9.15 and WAC 173-400-040(3) requires reasonable precautions to minimize or prevent fugitive emissions. The Puget Sound Clean Air Agency's current rule also describes specific examples of reasonable precautions. There is no difference between the current and SIP versions of WAC 173-400-040(3).

All the fugitive emission regulations have common monitoring methods of responding to complaints and looking for fugitive emissions. The Puget Sound Clean Air Agency has determined that monitoring should be quarterly for the reasons listed below.

1) Initial compliance. The Puget Sound Clean Air Agency has not observed fugitive emissions during any inspection in the past five years, nor has Boeing; therefore, the Agency concludes that it is generally in compliance with this requirement.

2) Margin of compliance. For known sources of potential fugitive dust, the buildings at Boeing are enclosed and all of the roadways and parking lots are paved and reasonably maintained. All the significant air pollution generating equipment has air pollution control devices and is inspected by Boeing periodically and maintained on a regular basis. Hence, the margin of compliance is considered large enough to warrant quarterly and as needed inspections.

3) Variability of process and emissions. While many of the processes are variable or batch operations, few if any are likely to cause fugitive emissions. The most likely cause of fugitive emissions would be a significant change in the process, one that would require approval from the Puget Sound Clean Air Agency, or major equipment failure.

4) Environmental impacts of problems. Because Boeing employs BACT for fugitive dust control, the likelihood of fugitive dust is very low. Any fugitive dust emissions are likely to be small and without significant environmental impact.

5) Technical considerations. The most likely causes of fugitive emissions at Boeing Auburn would be failure of existing control equipment or vehicle track-out during construction. Equipment failure is likely to be identified by some other inspection or complaints. Track-out is minimized because all the roadways and parking lots are paved and maintained.

5. 2. 7. Requirement I.A.9

Puget Sound Clean Air Agency Regulation I, Section 9.20 requires Boeing to maintain equipment in good working order. Section 9.20(a) applies to sources that received a Notice of Construction Order of Approval under Puget Sound Clean Air Agency Regulation I, Article 6. Section 9.20(b) applies to equipment not subject to Section 9.20(a). Section II, Monitoring, Maintenance and Recordkeeping Procedures, of the permit identifies the minimum monitoring criteria for maintaining equipment in good working order. The section identifies both facility criteria and specific criteria for the emission units and activities. In addition, the facility inspections provide monitoring of the general effectiveness of Boeing's Operation and Maintenance Plan. The Puget Sound Clean Air Agency chose to list all of Section II as the monitoring method because many parts of Section II apply to several emission units and activities. Where there are specific monitoring requirements for specific emission units, the Puget Sound Clean Air Agency has listed them in Section II.A.2. The facility inspection shall include a representative sample each quarter but that representative sample should not be the same each quarter. The Puget Sound Clean Air Agency has determined that following the requirements of Section II of the permit provides sufficient monitoring criteria to certify that the equipment has been maintained in good working order. However, the Puget Sound Clean Air Agency 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. 8. Requirement I.A.10

In accordance with Puget Sound Clean Air Agency Regulation I, Section 7.09(b), Boeing is required to develop and implement an Operation and Maintenance Plan (O&M Plan) to assure continuous compliance with Puget Sound Clean Air Agency 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, the Puget Sound Clean Air Agency 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 Puget Sound Clean Air Agency 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 Puget Sound Clean Air Agency 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.

Puget Sound Clean Air Agency Regulation I, Section 7.09(b) also requires Boeing 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 has a reasonable possibility of violating or that a violation would cause an air quality problem, the Puget Sound Clean Air Agency 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 is following good industrial practice.

As described in Section V.Q, Boeing must report to the Puget Sound Clean Air Agency 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 has the right to claim certain problems were a result of an emergency (Section V.S) or unavoidable (Section V.T).

Following these requirements demonstrates that Boeing has properly implemented the O&M Plan, but it does not prohibit the Puget Sound Clean Air Agency 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 was not using good industrial practice.

5. 2. 9. Requirement I.A.11

WAC 173-400-040(4) addresses odors. The monitoring method is based on responding to complaints and general inspections of the facility to identify emissions of odor-bearing contaminants. Receiving complaints does not necessarily mean Boeing is in violation of this requirement, since the regulation does not prohibit the emission of odors, but prohibits the emissions of odors if reasonable control measures are not employed. Complaints will trigger

action by Boeing to investigate and prevent a violation. Since the Puget Sound Clean Air Agency and Boeing have not received odor complaints concerning Boeing Auburn, the Puget Sound Clean Air Agency has determined that responding to complaints within three working days is appropriate.

5. 2. 10. Requirement I.A.12

WAC 173-400-040(2) 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. 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 is in violation of this requirement, but triggers action by the source to prevent a violation.

5. 2. 11. Requirement I.A.13

Puget Sound Clean Air Agency Regulation I, Section 9.10 specifies that HCl emissions shall not exceed 100 ppm (dry) corrected to 7% O_2 for combustion sources. Since Boeing burns only pipeline grade natural gas and distillate fuel oil 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. 12. Requirement I.A.14

RCW 70.94.040 is similar to Puget Sound Clean Air Agency Regulation I, Section 9.11 and is listed separately here because it is not a federally enforceable requirement.

5. 3 Section I.B

Section I.B. of the permit lists applicable requirements that are specific to an emission unit or activity. Following the name of each emission unit is a brief description of the emission unit or activity and some identifying information such as location and installation date. This information, which is in italics, is not an enforceable part of the permit. Due to the size of Boeing Auburn and its complexity, the information is provided as an aid in understanding the permit and as an aid to locate the 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. If a requirement in Section I.A. is repeated in this section, then the monitoring, maintenance, and recordkeeping method specified in this section supersedes the monitoring, maintenance, and recordkeeping method specified in Section I.A. Monitoring Methods and Reference Methods are also identified if they are different or in addition to those listed in Section I.A. Where a recently adopted federal regulation does not identify a monitoring method, the permit does not identify one either, because it is EPA's policy to incorporate all necessary monitoring into recently adopted federal regulations except where the Puget Sound Clean Air

Agency has determined it necessary. Finally, any requirements that are inapplicable to the specific emission unit are also listed in this section.

5. 3. 1. Chemical Tankline Processing Operations

This activity includes the equipment listed below and all activities associated with chemical process tankline operations except the NO_2 and H_2S scrubbers which are listed elsewhere in the permit. For the purpose of defining an "emission unit" in this permit, each piece of equipment listed below is considered a separate emission unit.

Bldg	*Col./Dr.*	*MSS/ID#*	*Order of Approval #*	*Install Date*	*Source Description*
17-06	*Door W-36/ W-37*	*12453*	*6109*	*1995*	*Scrubber*
17-06	*Door W-38*	*12174*	*6526*	*1996*	*Scrubber*
17-07	*South of Bldg.*	*4224*	*7045*	*1997*	*Scrubber #4*
17-07	*South of Bldg.*	*4223*	*7263*	*1997*	*Scrubber #3*
17-07	*South of Bldg.*	*11624*	*7332*	*1998*	*Scrubber #6*
17-08	*South end*	*64252*	*6760*	*1994*	*Scrubber*
17-45	*D/E1;Door 16*	*55146*	*8029*	*1991*	*Scrubber*
17-45	*D/E1;Door 16*	*55147*	*8029*	*1991*	*Scrubber*
17-45	*E1;Door 16*	*55148*	*8029*	*1991*	*Scrubber*
17-45	*E1, 2nd Floor*	*55149*	*8029*	*1991*	*Scrubber*
17-45	*G25; Door 31*	*60036*	*8029*	*1991*	*Chemical Milling Tank Line*
17-45	*G2; Door 31*	*60037*	*8029*	*1991*	*Chemical Milling Tank Line*
17-62	*O/S East*	*58010*	*3842*	*1992*	*Scrubber*
17-62	*O/S East*	*58015*	*3842*	*1992*	*Scrubber*
17-62	*O/S East*	*58013*	*3842*	*1992*	*Scrubber*
17-62	*O/S East*	*58017*	*3842*	*1992*	*Scrubber*
17-62	*O/S East*	*58023*	*3842*	*1992*	*Scrubber*
17-62	*O/S East*	*58035*	*3842*	*1992*	*Scrubber*
17-62	*O/S East*	*58038*	*3842*	*1992*	*Scrubber*
17-62	*O/S East*	*58040*	*8702*	*1992*	*Scrubber No. 6*
17-68	*A10.5*	*56536*	*3587*	*1991*	*Scrubber*
17-68	*A11*	*56584*	*3587*	*1991*	*Scrubber*
17-68	*A2*	*56585*	*3587*	*1991*	*Scrubber*
17-68	*A3*	*56602*	*3587*	*1991*	*Scrubber*
17-68	*A2.5*	*56586*	*3587*	*1991*	*Scrubber*
17-68	*O/S*	*4222*	*7264*	*1997*	*Scrubber*

There are no specific emission standards for these units; however in many case there are Order of Approval Conditions to install monitoring equipment or to monitor scrubber performance. In these cases, no additional monitoring is required. For other scrubbers, the monitoring method is based on checking for proper scrubber pump operation and visible emissions monthly and, checking for scrubbing fluid pH and nozzle pluggage at least once per calendar quarter in addition to conducting quarterly facility wide inspections and responding to complaints. Inspections are to be performed while the facility is in operation. If visible emissions other than uncombined water are observed that last longer than three minutes in an hour, Boeing shall, as soon as possible but within 24 hours of the initial observation, take corrective action until there are no visible emissions or, alternatively, record the opacity using the reference test method WDOE Method 9A, or shut down the unit or activity until it can be repaired. If Boeing finds

problems with the pumps, pH, or nozzles, Boeing shall, within 24 hours of 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 the above 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 Section V.Q. (Reporting). However, if Boeing does not take appropriate action within 24 hours, Boeing must report the deviation. The Puget Sound Clean Air Agency has determined that the monitoring frequency for the reasons listed below.

1. Compliance. None of the scrubbers normally have visible emissions. In addition, the Puget Sound Clean Air Agency has inspected this facility at least annually since 1986 and has not identified opacity issues, nor has Boeing. Therefore, we conclude that it generally complies with the opacity requirement and the margin of compliance is large. In addition, the monitoring method is designed so that Boeing will take corrective action before a violation occurs, further enhancing the compliance margin. During one inspection the Agency issued a Compliance Status Report (CSR) for allowing the operation of an AA Tank Line scrubber No. 2, MSS/ID#55147, in Building 17-45 with a leaking stack. Boeing corrected the problem and no further action taken.
2. Variability of process and emissions. The operations are primarily batch operations. The nature of the each batch cycle does not change and the uncontrolled emissions are small.
3. Environmental impacts of problems. Neither operation emits significant quantities of toxics nor particulate and considering the large amount of area around the Boeing Auburn facility the possibility of a nuisance problem caused by opacity is small.
4. Technical considerations. The most likely failures of the scrubbers would be pump failure and nozzle pluggage. Boeing would likely detect pump failure by the monthly inspections and would likely detect nozzle pluggage by either pump operation or visible emissions, hence quarterly inspections for nozzle pluggage are justified. Also, pH would likely only change if there is a fundament change in the process or failure of the pH control systems, while such changes are unlikely, checking the pH serves as an independent check for process changes.

Requirement No. EU 1.6 applies to the scrubber at Bldg. 17-08, MSS/ID# 64252 and requires Boeing not to operate more than 6 ventilated tanks at any one time on each of the tank lines. The monitoring method for this work practice requirement is to conduct Work Practice Inspections. Although MSS/ID# 64252 is a chromium electroplating operation or chromium anodizing tank, as approved by Order of Approval No. 6760 it can only be used for Research and Development. Therefore the requirements of 40 CFR Part 63, Subpart N, National Emission Standards (NESHAPS) for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks and Regulation III, Section 3.01, Hard and Decorative Chromium Electroplating and Chromium Anodizing do not apply.

Condition No. 5 of Order of Approval No. 8702 states “Boeing shall comply with the requirements of the draft Boeing Auburn Title V Air Operating Permit as proposed on the date this Order of Approval is signed, to be superseded by the final Boeing Auburn Title V Air Operating Permit when the permit is issued.” This condition is obsolete and was therefore not listed in the Boeing Auburn Air Operating Permit.

5. 3. 2. EU 2 - Aerospace Coating, Cleaning, Chemical Milling Maskant, and Depainting Operations

This section includes all activities and equipment associated with surface coating, cleaning, chemical milling maskant application, and depainting operations. These operations include coating mixing, application, drying, and curing; spray gun cleaning; solvent wipe and solvent flush cleaning; chemical milling maskant application; depainting; and material and waste handling operations subject to the Aerospace NESHAP (40 CFR Part 63 Subpart GG). Currently, the Auburn facility does not depaint completed aircraft. Therefore, the depainting requirements of the Aerospace NESHAP are not included in the permit.

The activities included in this section are conducted throughout the Auburn facility. For the purpose of defining an "emission unit" in this permit, each piece of equipment listed below is considered a separate emission unit. The last column in this list indicates whether Aerospace NESHAP-regulated coatings containing inorganic HAPs are sprayed in the unit at the time of permit issuance. Boeing may add other booths as long as it keeps a record of those addition booths. That log must be available for inspection at any time. Also, coatings that do not contain inorganic HAPs or coatings that are not primers or topcoats as defined in the Aerospace NESHAP are also being sprayed in these booths.

Bldg.	*Col/Dr*	*MSS/ID#*	*Order of Approval #*	*Date Installed*	*Source Description*	*Aerospace NESHAP Coatings with Inorganic HAP Used in Unit?*
17-05	*G11*	*6782*	*Reg.*	*1966*	*Spray coating booth - dry filter*	*Yes*
17-05	*C13*	*6785*	*Reg.*	*1966*	*Spray coating booth - dry filter*	*Yes*
17-05	*E10*	*6784*	*1250*	*1966*	*Spray coating booth - dry filter*	*Yes*
17-05	*A11*	*61261*	*5160*	*1993*	*Spray coating booth – waterwall*	*No*
17-06	*D1*	*6765*	*1991*	*1979*	*Spray coating booth - dry filter*	*Yes*
17-06	*D1*	*6766*	*1991*	*1979*	*Spray coating booth - dry filter*	*Yes*
17-07	*D10*	*9063*	*Reg.*	*1987*	*Spray coating booth - dry filter*	*No*
17-07	*AA10.5*	*12355*	*7279*	*1998*	*Spray coating booth - dry filter*	*Yes*
17-07	*BB10*	*12356*	*7279*	*1998*	*Spray coating booth - dry filter*	*Yes*
17-45	*C2 Finish Zone*	*13305*	*7302*	*1998*	*Spray coating booth – dry filter*	*Yes*
17-45	*C2 Finish Zone*	*13306*	*7302*	*1998*	*Spray coating booth – dry filter*	*Yes*
17-45	*C2 Finish Zone*	*13307*	*7302*	*1998*	*Spray coating booth – dry filter*	*Yes*
17-45	*C2 Finish Zone*	*13308*	*7302*	*1998*	*Spray coating booth – dry filter*	*Yes*
17-45	*C2*	*14921*	*7689*	*1999*	*Spray coating booth – dry filter (hand-dip line)*	*Yes*
17-45	*B1, Mezzanine*	*14720*	*7941*	*1999*	*Spray coating booth – dry filter (TCIB)*	*Yes*
17-45	*A1.9, 2nd Floor*	*55220*	*8029*	*1991*	*Spray coating booth – water wash*	*Yes*
17-45	*A1.7, 2nd Floor*	*55221*	*8029*	*1991*	*Spray coating booth – water wash*	*Yes*
17-45	*A1.5, 2nd Floor*	*55222*	*8029*	*1991*	*Spray coating booth – water wash*	*Yes*

Bldg.	*Col/Dr*	*MSS/ID#*	*Order of Approval #*	*Date Installed*	*Source Description*	*Aerospace NESHAP Coatings with Inorganic HAP Used in Unit?*
17-45	*B/C2 2ND FLR*	*55223*	*8029*	*1991*	*Spray coating booth – dry filter*	*Yes*
17-45	*B1.6 2nd FLR*	*55224*	*8029*	*1991*	*Spray coating booth – water wash*	*Yes*
17-45	*B1.8, 2nd Floor*	*55225*	*8029*	*1991*	*Spray coating booth – water wash*	*Yes*
17-45	*B2, 2ND FLR*	*55226*	*8029*	*1991*	*Spray coating booth – dry filter*	*Yes*
17-45	*F2.5*	*56105*	*8669*	*1991*	*Spray coating booth – dry filter*	*Yes*
17-45	*G/H2*	*59822*	*8506*	*1991*	*Spray coating booth – dry filter*	*Yes*
17-45	*C1*	*10695*	*8506*	*2001*	*Spray coating booth – dry filter (manual booth)*	*Yes*
17-62	*F2.5*	*58303*	*3842*	*1992*	*Spray coating booth – dry filter*	*Yes*
17-62	*E15*	*58305*	*3842*	*1992*	*Spray coating booth – dry filter*	*Yes*
17-68	*A7*	*56540*	*3587*	*1991*	*Spray coating booth – dry filter*	*Yes*
17-68	*A6.1*	*56541*	*3587*	*1991*	*Spray coating booth – dry filter*	*Yes*
17-68	*A7.5*	*59271*	*3587*	*1992*	*Spray coating booth – dry filter*	*Yes*
17-68	*E-1*	*10851*	*7639*	*2000*	*Dry lube spray booth*	*No*
17-45	*G2;Door 31*	*60037*	*8029*	*1991*	*Chemical Milling Tank Line*	*NA*
17-45	*F7*	*3808*	*8747*	*2003*	*Spray coating booth – dry filter*	*Yes*
17-62		*6783*	*8835*	*2003*	*Spray coating booth – dry filter*	*Yes*

(a) Aerospace NESHAPS

40 CFR 63 Subpart A (40 CFR 60.6) requires Startup, Shutdown, and Malfunction Plans for all equipment that controls regulated HAPs. In this case, dry filters systems control HAPs. However, 40 CFR 63.743(b) specifically exempts dry filters from the requirement to have a Startup, Shutdown, and Malfunction Plan (SSMP) as long as the manufacturer's instructions are being followed. Boeing, however, must report any deviation of those recommendations as permit deviations. Boeing also has the responsibility to maintain the dry filters according to Puget Sound Clean Air Agency O&M Plan requirements. Elsewhere, the permit requires Boeing to report all instances where the filters were not operated and maintained properly. However, if Boeing finds that it must deviate from the manufacturer's instructions, Boeing must develop a Startup, Shutdown, and Malfunction Plan. The permit contains operation and maintenance procedures for establishing filter pressure drop outside the manufacturer's instructions. The Aerospace NESHAP is not clear on if an SSMP is necessary if Boeing does not follow the manufacture's specifications as to pressure drop. This is because in 40 CFR 63.743(b) it refers to following the manufacture's instructions and 40 CFR 63.745(g)(3) refers to following the manufacture's specifications. To further complicate the issue, the preamble to 40 CFR 63 Subpart GG referred to "the pressure drop is outside of the manufacturer's recommended limits." 45954 Federal Register / Vol. 60, No. 170 / Friday, September 1, 1995. The Puget Sound Clean Air Agency has determined that manufacture's instructions, specifications, and recommendations all mean very much the same thing. Therefore, any time Boeing chooses to normally operate a filter in a manner inconsistent with the manufacturer's instructions, specifications, or recommendations, Boeing must develop and follow a SSMP. As stated in 40 CFR 63.734(b)(2),

the plan shall include a systematic procedure for identifying malfunctions and reporting them immediately to supervisory personnel.

The permit lists the applicable requirements of the Aerospace NESHAP, 40 CFR 63 subpart GG, including the monitoring requirements. Where the permit does not list a monitoring method or reference method, EPA did not specify one in the NESHAP and none is required under EPA policy. However, in some cases, the Puget Sound Clean Air Agency has determined that additional monitoring is necessary; this includes periodic checks of the filter integrity for spray booths. The frequency for checking filter integrity may be less than in other Puget Sound Clean Air Agency operating permits because almost all the booths have at least two-stage filters and it is very unlikely that failure of both stages at the same time would go undetected by the other monitoring procedures.

If Boeing observes problems for which there are no monitoring requirements under an applicable NESHAP, and corrects such problems within 24 hours, Boeing does not need to report the deviation under Section V.M. (Compliance Certification) or V.Q (Reporting). Examples of such requirements that do not have monitoring requirements include 40 CFR 63.744(a)(1) *Place cleaning solvent-laden cloth, paper or any other absorbent applicator used for cleaning in bags or other closed containers upon completing their use*, and 40 CFR 63.744(a)(3) *Handling and transfer of cleaning solvents conducted in a manner to minimize spills.* For the purpose of determining compliance with the work practice requirements of 40 CFR 63.744(a)(1) for solvent rag management, "completing their use" means upon completion of the cleaning operation, before leaving for a break, or the end of a shift; whichever comes first.

Cleaning, primer application, and topcoat application operations subject to the Aerospace NESHAP (40 CFR Part 63 Subpart GG) are included in this section.

Currently, Auburn does not depaint more than six completed aircraft each calendar year.

Requirement No. EU 2.78 through EU 2.82 are the Aerospace NESHAP requirements related to application of chemical milling maskants to aerospace parts and products. These operations include chemical milling maskant mixing, application, drying, and curing. The operations are conducted at the Auburn 17-45 facility, and use either compliant waterborne maskants, or maskants that are exempt from the Aerospace NESHAP in accordance with 40 CFR 63.741(f) because of their use as specialty coatings or because the HAP and VOC concentrations are less than 0.1% for carcinogens or 1.0% for noncarcinogens.

Requirement No. EU 2.95 (PSD No. 88-5 Amendment 2 Approval Condition 3) requires that only water-based chemicals shall be used in the maskant dip tank. The Agency has determined that water-based chemicals means the same thing as "waterborne coating" in 40 CFR 63.742 (contains more than 5 percent water by weight as applied in its volatile fraction). 40 CFR 63.741(i) exempt any waterborne coating for which the manufacturer's supplied data demonstrate that organic HAP and VOC contents are less than or equal to the organic HAP and VOC content limits for its coating type, as specified in 40 CFR 63.747(c) from the following requirements 40 CFR 63.747(d) and (e), 63.750(m), 63.752(f), and 63.753(e). However that paragraph requires the facility to maintain the manufacturer's supplied data and annual purchase records for each exempt waterborne coating readily available for inspection and review and shall retain these data for 5 years. Hence, Boeing can only use waterborne coatings and is exempt from most of the requirements chemical milling maskant requirements in 40 CFR 63 subpart GG. If Boeing were

to change to a non-waterborne maskant in the dip tank, Boeing would have to first request a major permit modification and a modification of the PSD Permit.

(b) Local Requirements

The federally enforceable version of Puget Sound Clean Air Agency Regulation I, Section 9.16 requires that all spray coating operations be conducted inside an enclosure with overspray controls and a vertical stack approved by the Puget Sound Clean Air Agency. It allows for some exemptions such as hand-held aerosol cans and large stationary objects like bridges and buildings. It also allows the Control Officer to approve spray coating objects that cannot be reasonably handled in an enclosed spray area. The requirement is also listed in Section IV.D of the permit as an activity requiring additional approval. Puget Sound Clean Air Agency has recently changed Section 9.16 of Regulation I to exempt activities that must comply with the aerospace NESHAP. If EPA approves this amended rule as a SIP change, this section will no longer apply when Boeing conducts activities that must comply with the aerospace NESHAP.

The booths installed after 1974 were approved by NOC Orders of Approval. The Puget Sound Clean Air Agency has determined, in addition to the Order of Approval Notice of Completion, Boeing will conduct periodic facility-wide inspections that include looking for spray coating operations that do not comply with the requirements of Section 9.16.

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

In Regulation III, Section 2.02, the Puget Sound Clean Air Agency adopted by reference the NESHAP regulations in 40 CFR Part 63, including the Aerospace NESHAP. This is a state-only provision. Since the NESHAP requirements, including the monitoring and reporting methods, are listed elsewhere in the permit, they are not repeated here.

Several Notice of Construction Orders of approval specify that Boeing must install three stage filters. In this context, a Three Stage Paint Booth Filter is one that meets the requirements listed in Tables 3 & 4 in 40 CFR 63.745(g).

Boeing requested that the permit define primer and topcoat to mean coatings with the following specifications: Primers are BMS 10-11 type I, certain BMS 10-72 primers and exterior decorative uses of BMS 10-103; Topcoats are BMS 10-11 type II, BMS 10-60 types I & II, and BMS 10-72 topcoats. Boeing stated that all other BMS coatings have additional performance criteria and are exempt as Specialty Coatings, per 40 CFR 63.741(f) Applicability and 40 CFR 63.742 Definitions of topcoats and primers. Boeing added that a list of BMS 10-72 primers and BMS 10-72 topcoats shall be maintained on file. While the statement may be true at this time, the Puget Sound Clean Air Agency has determined that it could not add the statement to the

permit without also adding the Boeing specifications into the permit. Therefore, such a statement is not in the permit.

(c) PSD Requirements

Applicable requirements of the various PSD permits are included in the permit. However some of the PSD approval conditions have been satisfied and are obsolete and not included in the permit. PSD 88-5 Amendment 2 deals with activities in the sheet metal center (Building 17-45). The activities include cleaning, chemical milling, and surface coating of aerospace parts.

Requirement No. EU 2.95 (PSD No. 88-5 Amendment 2 Approval Condition 3) requires that only water-based chemicals shall be used in the maskant dip tank. However, the approval is not clear what is qualifies as "water-based chemicals." For the purposes of this requirement the Puget Sound Clean Air Agency has determined that maskants that meet the definition of "waterborne coating" in 40 CFR 63.742 (contains more than 5 percent water by weight as applied in its volatile fraction) are "water-based chemicals".

Requirement No. EU 2.96 (PSD No. 88-5 Amendment 2 Approval Condition 4) requires that at least 50 percent of the paint used at Building 17-45 shall be applied in a spray booth by use of high transfer efficiency (HTE) painting equipment and methods, such as: high volume low pressure (HVLP) spray guns or electrostatic paint application. Puget Sound Clean Air Agency has determined that at least half of all the paint used in Building 17-45 be applied meeting both the requirement of using HTE equipment and applied in a booth. Regulation I, Section 9.16 requires all indoor spray coating operations, regulated by that section, to be conducted in a booth. Coating operations subject to 40 CFR Part 63, Subpart GG are not subject to Regulation I, Section 9.16, but also must be conducted in a booth. Hence it is highly unlikely that any spray coating operations in Building 17-45 will be conducted outside a spray booth, let alone 50%, and therefore the only monitoring required is the Work Practice Inspections. Both 40 CFR 63.745(f) (EU 2.54) and Regulation II, Section 3.09(c) (EU2.89) require most aerospace related spray coating operations to be done using HTE. Therefore, Boeing only needs to demonstrate that more than 50% of the spray coating conducted in Building 17-45 is regulated by either 40 CFR 63.745(f) (EU 2.54) and Regulation II, Section 3.09(c) (EU 2.86). Applicable requirements of the various PSD permits are included in the permit. However some of the PSD approval conditions have been satisfied and are obsolete and not included in the permit.

PSD Approval No. 88-5, Condition 7 stated the PSD permit will become void if construction did not commence within 18 months. Construction did commence within 18 months and has been completed, hence the requirement is obsolete. Condition 9 requires Boeing to notify Ecology and the agency within 30 days of beginning of operation in the Sheet Metal Center. This condition is obsolete. Therefore none of the above conditions are included in the permit.

5. 3. 3. EU 3 – Non-aerospace Parts Surface Coating Operations

This section includes all activities and equipment associated with surface coating operations on non- aerospace parts and assemblies, such as tooling, equipment, and motor vehicles and mobile equipment. Surface coating operations include coating mixing and application, gun cleaning, solvent wipe cleaning, coating drying or curing in ovens or other areas, depainting (except depainting of aircraft), and material and waste handling. The following equipment in this section has received an NOC Order of Approval, or has otherwise been registered with the Puget Sound

Clean Air Agency. For the purpose of defining an "emission unit" in this permit, each piece of equipment listed below is considered a separate emission unit.

Bldg	*Col./Dr*	*MSS/ID#*	*Order of Approval #*	*Install Date*	*Source Description*
17-04	*A7*	*6790*	*Reg.*	*1987*	*Spray Coating Booth - dry filter*
17-08	*C5.5*	*61615*	*5404*	*1994*	*Spray Coating Booth - dry filter*
17-66	*J5*	*6778*	*5987*	*1993*	*Spray Coating Booth - dry filter*
17-66	*D10*	*60710*	*4732*	*1992*	*Spray Coating Booth - dry filter*

Requirements that govern this activity include the Puget Sound Clean Air Agency's O&M Plan requirement, the spray coating requirement in Puget Sound Clean Air Agency Regulation I, Section 9.16, the Notice of Construction Approval conditions, and rules governing the VOC content of motor vehicle coatings and their application. As with aerospace coatings, the Puget Sound Clean Air Agency has determined that maintaining manufacturer's data on the VOC content of the coating, periodic work practice inspections and reporting deviations as required in Section V.Q.(2) of the permit are reasonable monitoring requirements. The other requirements in Regulation II, Section 2.08 deal with how information about the VOC content is displayed, the acceptable application methods, spray equipment cleaning procedures and storage of VOC containing material. As with similar requirements in the aerospace NESHAP which do not require monitoring or recordkeeping, the Puget Sound Clean Air Agency has determined that work practice inspections are sufficient monitoring methods for these requirements. However, for spray booths the Puget Sound Clean Air Agency requires periodic checks of the filter integrity or wash-water flow rate. After considering that all the dry filters will be either two or three-stage filters instead of the normal one-stage filter and EPA does not require monitoring of spray booths that use paints that do not contain inorganic HAP, the Puget Sound Clean Air Agency has determined that monthly or quarterly checking is adequate for this non-aerospace coating activity.

5. 3. 4. EU 3 – Fuel Burning Equipment (Subject to New Source Performance Standards)

This section includes the steam generating boilers that are subject to the Standards of Performance for New Stationary Sources in 40 CFR Part 60 Subpart Dc. All five boilers only use natural gas as fuel. For purposes of defining an "emission unit" in this permit, each listed below is considered a separate emission unit.

Bldg.	*Col./Dr.*	*MSS/ID#*	*Order of Approval #*	*Install Date*	*Source Description*
17-09	*Boiler Room*	*6827*	*7271*	*1998*	*Boiler #4, 95 MMBtu/hr, gas fired with low NOx burners*
17-62	*G2*	*58127*	*3842*	*1992*	*Boiler, 12.6 MMBtu/hr, gas fired*
17-62	*G2*	*58128*	*3842*	*1992*	*Boiler, 12.6 MMBtu/hr, gas fired*
17-66	*K5*	*60202*	*5986*	*1993*	*Boiler, 10.4 MMBtu/hr, gas fired*
17-66	*J5*	*60203*	*5986*	*1993*	*Boiler, 10.4 MMBtu/hr, gas fired*

Since the fuel is limited to natural gas, the Puget Sound Clean Air Agency has determined that the incinerator requirements in WAC 173-400-050(2) do not apply.

(a) NSPS Subpart Dc - Applicability

The New Source Performance Standards 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 less than 100 million Btu/hour but greater than or equal to 10 million Btu/hour.

(b) NSPS Subpart A - General Provisions

In accordance with 40 CFR 60.1(a), the provisions of 40 CFR Part 60, Subpart A apply to Boeing Auburn since Boeing Auburn operates boilers that are subject to 40 CFR Part 60, Subpart Dc. However, many of the requirements are not appropriately listed in Section I. EU 3, but are listed throughout the operating permit. The following describes why requirements were listed in certain locations and how they affect Boeing Auburn:

40 CFR 60.1(a) is listed in the table since this is a general statement of applicability. No monitoring is required since it is not a specific requirement but general in nature. The general provisions apply to the boilers listed in the operating permit as subject to 40 CFR Part 60, Subpart Dc.

40 CFR 60.1(b) states that any new or revised standard of performance shall apply to the owner or operator of a stationary source that contains an affected facility, the construction of which is commenced after the date of publication in this part of such a new or revised standard. This requirement is not included in the operating permit since it merely specifies that a specific subpart will apply to an affected source. Once it is determined the subpart is applicable, the specific requirements are included in the operating permit.

40 CFR 60.1(c) states that an operating permit may be required and refers to Part 70 requirements. This requirement is not included since it is not a specific requirement but directs the reader to Part 70 requirements. Boeing Auburn is an operating permit source for other reasons.

40 CFR 60.1(d) applies only to one pharmaceutical manufacturing facility and not to Boeing Auburn.

40 CFR 60.2 includes definitions and 40 CFR 60.3 includes units and abbreviations. Although the definitions are critical in determining applicability and compliance with the NSPS, these sections are not included in the operating permit since they are not specific requirements.

40 CFR 60.4 specifies where to send reports.

40 CFR 60.5 states that upon request, the Administrator will make a determination of whether an action taken or intended to be taken constitutes construction or modification. This is not a requirement on Boeing Auburn so it is not included in the operating permit.

40 CFR 60.6 states that upon request, the Administrator will review plans for construction or modification for the purpose of providing technical advice. This is not a requirement on Boeing Auburn but on the Administrator so it is not included in the operating permit.

40 CFR 60.7 specifies notification and general recordkeeping requirements. 40 CFR 60.7(a) is also listed as a specific requirement under Section IV.A of the operating permit (Section IV covers activities that require additional approval). This includes all new source review requirements. The operating permit specifies that for sources subject to an

emission standard in 40 CFR Part 60, Boeing Auburn shall furnish written notification to the Puget Sound Clean Air Agency and EPA Region 10 in accordance with 40 CFR 60.7(a). This requirement is triggered by construction or modification and would be part of the Puget Sound Clean Air Agency's new source review in accordance with Regulation I, Article 6. The specific notification deadlines in 40 CFR 60.7(a) are included in Section V of the operating permit to assist Boeing Auburn in complying with these provisions. Similarly, the general recordkeeping requirements in 40 CFR 60.7(b) and (f) are listed under the specific emission unit and referred to in the Reporting and Notification Requirements (Section V). Although this is repetitive, it appropriately fits in both sections.

The requirements in 40 CFR 60.7(c) and (d) apply to continuous monitoring systems (CMS) or monitoring devices which are not required for these boilers. 40 CFR 60.7(g) states that if notification substantially similar to 40 CFR 60.7(a) is required by the local agency, sending a copy of that notification will satisfy the 40 CFR 60.7(a). Section IV A of the permit contains a similar notification.

40 CFR 60.8 applies only to affected sources subject to an NSPS that requires performance tests to demonstrate compliance. In this case, there are no required NSPS performance tests, hence the section is not listed in the permit.

40 CFR 60.9 and 60.10 are not listed in the operating permit since they are not specific requirements for Boeing Auburn, but address availability of information to the public and state authority.

40 CFR 60.11 includes requirements regarding compliance with standards and maintenance requirements. 40 CFR 60.11(a) refers to the performance test requirements in 40 CFR 60.8 unless other methods are specified in the applicable standard. For NSPS Subpart Dc emission units at Boeing Auburn, there are no testing methods that the NSPS requires so 40 CFR 60.11(a) is not listed in the operating permit. 40 CFR 60.11(b) and (c) also are not listed in the operating permit because the Subpart Dc emission units at Boeing Auburn are not subject to opacity limits in the Subpart Dc standard.

40 CFR 60.11(d) is listed since it specifies that at all times, including periods of startup, shutdown and malfunction, Boeing Auburn shall, to the extent possible, maintain and operate any unit including control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable practices are being used will be based on information available including monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

40 CFR 60.11(e) is not listed in the operating permit because Subpart Dc emission standards deal only with the initial compliance test, which is an obsolete requirement.

40 CFR 60.11(g) is included in the V. Standard Terms and Condition of the operating permit with other more general credible evidence provisions. This section would only be cited if the emission unit was subject to a Subpart Dc standard.

40 CFR 60.12 is included in Section III Prohibited Activities of the operating permit with other more general requirements regarding concealment. This section would only be cited if the emission unit was subject to an NSPS standard.

40 CFR 60.13(a) is not included because Subpart Dc does not require the installation of a continuous monitoring system. 40 CFR 60.13(b) deals with operating monitoring systems prior to the performance test but none is required by Subpart Dc. 40 CFR 60.13(c) deals with an opacity monitoring option that Boeing did not select, so it is not included in the permit. 40 CFR 60.13(g) is not included in the permit because it deals with two or more boilers venting to the same stack, which is not the case here.

40 CFR 60.14 is listed with new source review requirements in Section IV.A of the operating permit since this section is specific to modifications. The Puget Sound Clean Air Agency would review the physical or operational change in accordance with the procedures in Puget Sound Clean Air Agency Regulation I, Article 6. 40 CFR 60.14(g) specifies that Boeing Auburn would have to comply with the NSPS requirements (if applicable) within 180 days of the completion of the physical or operational change.

40 CFR 60.15 is listed both in Section I.B. 3 and with new source requirements in Section V.A of the operating permit since 40 CFR 60.15 addresses reconstruction. 40 CFR 60.15 says that the individual subparts of Part 60 may include specific provision which refine and delimit the concept of reconstruction. Subpart Dc does not contain such a refinement, hence is not included in the permit.

40 CFR 60.16 and 40 CFR 60.17 are not listed as operating permit conditions since they do not specify requirements, but list prioritized major source categories and materials that are incorporated by reference. Section 40 CFR 60.18 is not included in the operating permit since Boeing Auburn does not operate flares to comply with NSPS requirements.

(c) NSPS Subpart Dc

40 CFR 60.40c defines an affected facility as a steam generating unit that commenced construction after June 9, 1989 and has a heat input rate of less than 100 million Btu/hour but greater than or equal to 10 million Btu/hour. All four boilers listed above meet this applicability. This paragraph exempts units from the particulate and SO_2 requirements during periods of combustion research. These boilers are not normally used for combustion research; moreover, there are no particulate and SO_2 requirements required by Subpart Dc for these boilers.

40 CFR 60.42c SO_2 standards.

40 CFR 60.42c lists various sulfur dioxide (SO_2) emission requirements for this size boiler that burns coal or oil. These boilers are not capable of burning such fuel and would require a Notice of Construction Approval to do so; therefore, 40 CFR 60.42c does not apply to these boilers.

40 CFR 60.43c Particulate and opacity standards.

40 CFR 60.43c lists various particulate and opacity requirements for this size boiler that burns coal, oil, or wood. These boilers are not capable of burning such fuel and would require a Notice of Construction Approval to do so; therefore, 40 CFR 60.43c does not apply to these boilers.

40 CFR 60.44c, 45c, 46c, and 47c Compliance, performance, and monitoring test methods and procedures.

40 CFR 60.44c, 45c, 46c, and 47c contain compliance, performance, and monitoring test methods and procedures for sources that are subject to standards under 40 CFR 60.42c or 43c. Since these boilers are not subject to these standards, they are not subject to these test methods and procedures.

40 CFR 60.48c Reporting & Recordkeeping

40 CFR 60.48c(a) requires Boeing to notify the agency, as required in 40 CFR 60.7, of any construction or reconstruction of a boiler in this size range. This requirement is listed with 40 CFR 60.7 in the permit.

40 CFR 60.48c(b), (c), (d), (e), and (f) list reporting and recordkeeping requirements for facilities that burn coal, oil, or wood. Since these boilers are not capable of burning such fuel, these sections do not apply.

40 CFR 60.48(g) requires affected facilities to record and maintain records of the amounts of fuel combusted each day. However, in November 2000, Boeing requested that the recordkeeping frequency for a number of Boeing Auburn natural gas fired boilers (subject to the requirements of NSPS Dc) be reduced from daily to monthly. This request was based on a letter written by Doug Hardesty, EPA Region 10, to Joseph Williams, Washington Department of Ecology, stating that a reduction of the recordkeeping frequency from daily to monthly for natural gas fired NSPS Dc boilers could be granted on a case-by-case basis. Hardesty's letter outlined the steps that would need to be taken to achieve this reduction in the recordkeeping frequency. As outlined in Hardesty's letter, the Puget Sound Clean Air Agency sent a letter on April 3, 2001 to EPA Region 10 asking if the EPA had any comments regarding reducing the recordkeeping frequency for the Boeing Auburn natural gas boilers subject to NSPS Dc. No comments were received. On April 24, 2001, the Puget Sound Clean Air Agency sent a letter to Boeing stating that it would approve a reduction in the recordkeeping frequency, but that the best way to make the recordkeeping reduction enforceable was to modify the original Orders of Approval for the boilers. On May 21, 2001, the Puget Sound Clean Air Agency received a letter from Boeing asking that the Orders of Approval No. 3842 and, No. 5986 which permit the operation of natural gas NSPS Dc Boilers, be modified to include the recordkeeping reduction and Puget Sound Clean Air Agency approved the change on June 12, 2001. The Agency had previously approved monthly monitoring for Boiler No. 4 in Order of Approval No. 7271 (issued on 5/29/98).

40 CFR 60.48c(h) deals with facilities with a federally enforceable requirement limiting the annual capacity factor. These boilers have no such requirement and 40 CFR 60.48(h) does not apply.

40 CFR 60.48c(i) requires that all records required under Subpart Dc be maintained by the owner or operator for two years following the date of record. However, Boeing is required, elsewhere in the permit, to maintain such records for five years.

40 CFR 60.48c(j) establishes the reporting period for reports required by Subpart Dc. However, there are no reports required by Subpart Dc for these boilers. Hence, 40 CFR 60.48c(j) does not apply to these boilers. There are some notifications; however. As used in the Subpart reports are periodic and deal with emissions and excess emissions. Notifications are not periodic and usually deal with changes to the equipment or its operation.

(d) Fuel Burning Opacity

Both WAC 173-400-040(1) and Puget Sound Clean Air Agency Regulation I, Section 9.03 standards are 20% opacity and apply to the fuel burning equipment at Boeing Auburn. Although the permit lists all these requirements together, Boeing must comply with each.

The fuel burning equipment subject to this monitoring method at Boeing Auburn can only burn natural gas. The monitoring method requires checking for visible emissions once per quarter, and the frequency was determined based on the following.

1) Compliance. None of the fuel burning equipment at Boeing Auburn normally has visible emissions. The Puget Sound Clean Air Agency has inspected this facility at least annually since 1986 and has not identified opacity issues at the fuel burning equipment, nor has Boeing. Therefore, we conclude that it is generally in compliance with the opacity requirement and the margin of compliance is large. In addition, the monitoring method is designed so that Boeing will take corrective action before a violation occurs, further enhancing the compliance margin.

2) Variability of process and emissions. The equipment burns natural gas. The steam and heat demand at Boeing fluctuates throughout the day and from season-to-season, causing variations in load on the equipment. These boilers are only shut down completely for annual maintenance or if a problem occurs where more frequent maintenance is required. Typically, one boiler is in operation while the other two are in "hot stand-by" mode, meaning the unit is still under pressure and the burner modulates to maintain a set pressure level. Once per year, the boilers are taken down to undergo pressure vessel testing. However, the demand is very predictable and seldom changes quickly.

3) Environmental impacts of problems. Observed opacity is generally related to emissions of particulate matter or finely divided liquid droplets. The fuel burning activities at Boeing Auburn typically do not generate significant quantities of particulate matter, typically less than one ton per year. Hence, the environmental impacts of the emissions are small especially considering the amount of land on which the facility is located. A maintenance problem is unlikely to result in emissions that would have a significant environmental impact.

4) Technical considerations. Although the opacity standard is 20%, the monitoring method requires corrective action, or Reference Method testing, upon detection of visible emissions. This will provide an added margin of compliance.

(e) Fuel Burning Particulate

Puget Sound Clean Air Agency Regulation I, Section 9.09 also limits particulate emissions to 0.05 gr/dscf corrected to 7% oxygen from fuel burning equipment (i.e., equipment that produces hot air, hot water, steam, or other heated fluids by external combustion of fuel) combusting natural gas. WAC 173-400-050(1) limits particulate emissions to 0.1 gr/dscf corrected to 7% O_2 from all combustion units (i.e., units using combustion for steam production or other process requirements, excluding open burning). Boeing burns only pipeline grade natural gas. It can be shown, as in Section 5. 2. 4 for SO_2, that if fuels are properly burned, Boeing is incapable of violating this standard while complying with the other requirements such as the fuel content and opacity requirements. Improper fuel burning that would result in high particulate emissions

would also cause opacity problems and would be detected by the Fuel Burning Opacity monitoring requirement.

(f) Fuel Standards

The permit does not contain Puget Sound Clean Air Agency Regulation I, Section 9.08(a) and Revised Code of Washington, RCW, 70.94.610 "Burning used fuel oil in land-based facilities" because the boilers in this activity cannot burn such oil.

(g) Federal Standards

Puget Sound Clean Air Agency Regulation I, Section 6.11 and WAC 173-400-115 both adopt by reference the federal new source performance standards in 40 CFR Part 60.

5. 3. 5. EU 5 - Non NSPS - Fuel Burning Equipment

This section includes all activities and equipment associated with combustion of natural gas in autoclaves. Fuel burning equipment listed in this section is not subject to the New Source Performance Standards (Subpart Dc).

The equipment listed below has been permitted under a Notice of Construction Order of Approval. For the purpose of defining an "emission unit" in this permit, each piece of equipment listed below is considered a separate emission unit.

Bldg.	*Col./Dr.*	*MSS/ID#*	*Order of Approval #*	*Install Date*	*Source Description*
17-05	*A6*	*57379*	*3552*	*1990*	*Autoclave #7, 16 MMBTU/hr, gas fired*
17-05	*F16-G16*	*7376*	*Reg.*	*1967*	*Autoclave #6, 40 MMBTU/hr, gas fired*
17-09	*Boiler Room*	*6830*	*Reg.*	*1966*	*Boiler #1, 150 MMBtu/hr, gas & diesel #2*
17-09	*Boiler Room*	*6829*	*Reg.*	*1966*	*Boiler #2, 150 MMBtu/hr, gas & diesel #2*
17-09	*Boiler Room*	*6828*	*Reg.*	*1966*	*Boiler #3, 150 MMBtu/hr, gas & diesel #2*
17-10	*AA1.5*	*8190*	*Reg.*	*1966*	*Process Furnace, 34 MMBtu/hr, gas fired*

(a) Fuel Burning Opacity

Both WAC 173-400-040(1) and Puget Sound Clean Air Agency Regulation I, Section 9.03 standards are 20% opacity and apply to the fuel burning equipment at Boeing Auburn. Although the permit lists all these requirements together, Boeing must comply with each.

The fuel burning equipment at Boeing Auburn can burn natural gas and fuel oil. The monitoring method requires checking for visible emissions once per quarter.

1) Compliance. None of the fuel burning equipment at Boeing Auburn normally has visible emissions. The Puget Sound Clean Air Agency has inspected this facility at least annually since 1986 and has not identified opacity issues at the fuel burning equipment, nor has Boeing. Therefore, we conclude that it is generally in compliance with the opacity requirement and the margin of compliance is large. In addition, the monitoring method is

designed so that Boeing will take corrective action before a violation occurs, further enhancing the compliance margin.

2) Variability of process and emissions. The equipment burns natural gas and fuel oil. The heat demand at Boeing fluctuates throughout the day, causing variations in load on the equipment and the need to startup and shutdown equipment. However, the demand very predictable and seldom changes quickly.

3) Environmental impacts of problems. Observed opacity is generally related to emissions of particulate matter or finely divided liquid droplets. The fuel burning activities at Boeing Auburn typically do not generate significant quantities of particulate matter, typically less than one ton per year. Hence, the environmental impacts of the emissions are small especially considering the amount of land on which the facility is located. A maintenance problem is unlikely to result in emissions that would have a significant environmental impact.

4) Technical considerations. Although the opacity standard is 20% the monitoring method requires corrective action, or Reference Method testing, upon detection of visible emissions. This will provide an added margin of compliance.

(b) Fuel Burning Particulate

Puget Sound Clean Air Agency Regulation I, Section 9.09 also limits particulate emissions to 0.05 gr/dscf corrected to 7% oxygen from fuel burning equipment (i.e., equipment that produces hot air, hot water, steam, or other heated fluids by external combustion of fuel) combusting natural gas. In this case, the autoclaves qualify as fuel burning equipment because they produce hot air by external combustion. WAC 173-400-050(1) limits particulate emissions to 0.1 gr/dscf corrected to 7% O_2 from all combustion units (i.e., units using combustion for steam production or other process requirements, excluding open burning). Boeing burns only pipeline grade natural gas and diesel fuel in these units. It can be shown, as in Section 5. 2. 4 for SO_2, that if fuels are properly burned, Boeing is incapable of violating this standard while complying with the other requirements such as the fuel content and opacity requirements. Improper fuel burning that would result in high particulate emissions would also cause opacity problems and would be detected by the opacity monitoring requirement.

5. 3. 6. EU 6 – Wastewater Pretreatment Operations

This section includes activities and equipment associated with the industrial waste water pretreatment operations at Building 17-15, including chemical and physical treatment methods, waste water storage tanks and containers, sludge drying, material and waste handling, and air emission control equipment. This emission unit receives off-site waste and is therefore subject to the Off-Site Waste and Recovery Operations NESHAP (40 CFR Part 63 Subpart DD). At the time of permit issuance, the total annual quantity of HAP contained in the off-site material received at the plant site is less than 1 megagram (2200 pounds) per year. Under an alternate operating scenario, the total annual quantity of HAP contained in the off-site material received at the plant site is more than 1 megagram (2200 pounds) per year but the average VOHAP concentration of each off-site material stream regulated under Subpart DD and managed in the treatment plant is less than 500 ppmw at the point-of-delivery.

There is no equipment in this section that has been permitted under a Notice of Construction, or has otherwise been registered with the Puget Sound Air Pollution Control Agency

This emission unit does not include any process vents as defined by 40 CFR 63.680(c)(1)(ii). The emission unit also does not include any equipment leaks as defined by 40 CFR 63.680(c)(3) because none of the equipment component contain or contracts off-site material having a total HAP concentration equal to or greater than 10% by weight. Therefore, section 40 CFR 63.691 does not apply. Since Boeing has chosen to comply with the requirements for off-site material management units by following 40 CFR 63.683(b)(1)(iii) and not (i) or (ii), sections 40 CFR 63.684 through 63.689 do not apply. Similarly, since Boeing has chosen to comply with the requirements for process vents by following 40 CFR 63.683(c)(1)(ii), section 40 CFR 63.690 does not apply.

Because Boeing has chosen to comply following 40 CFR 63.683(b)(1)(iii) and (1)(ii), and sections 40 CFR 63.684 through 63.690 do not apply, 40 CFR 63.695 Inspection and monitoring requirements does not apply. In addition, 40 CFR 63.696 (b) through (h) do not apply because they have no equipment or process subject to section 40 CFR 63.684 through 63.690.

40 CFR 63.10(d)(5)(i) and (ii) do not apply because there is no equipment to startup, shutdown or malfunction in this emission unit.

5. 3. 7. EU 7 – Cyclones, Baghouses, and Other Particulate Control Operations

This section includes all cyclones, baghouses, and other equipment, which exhaust to the outside and control particulate emissions from the various activities including but not limited to machining of metal or nonmetal parts, housecleaning, and salt bath operations. For the purpose of defining an emission unit in this permit, each piece of equipment is considered a separate emission unit.

The emission units range in size from about 60,000 cfm to less than 1000 cfm cyclone baghouse.

The Puget Sound Clean Air Agency has determined the monitoring frequency based on the following.

1. Initial compliance. The Puget Sound Clean Air Agency has not observed visible emissions from any of these activities during any inspection in the last five years; therefore, we conclude that Boeing Auburn generally complies with the particulate and opacity requirements.
2. Margin of compliance. Because of the type of process (woodworking, grinding and machining) and the control equipment (baghouses and cyclones), the Puget Sound Clean Air Agency expects the concentration of particulate to be much less than the standard when there is no visible emission, fallout or fugitive emissions.
3. Variability of process and emissions. Although the equipment runs periodically, the actual emissions are not significant and not likely to cause a nuisance.
4. Environmental impacts of problems. These dust collectors emit small amount of particulate, usually less than a ton each year. A maintenance problem is unlikely to result in emissions that would have a significant environmental impact.

5. Technical considerations. The mostly likely type of problem would be a gradual equipment failure like normal wear and tear. Such failure could easily be detected by checking for visible emissions, fugitive emissions, fallout, and pressure drop across the control equipment. Because of the nature of the potential problems, Puget Sound Clean Air Agency has determined that the units should be divided into those systems that should be checked for visible emissions and fugitive dust ***monthly***, and those that should be checked ***quarterly***.

Monthly monitoring for visible emissions and fugitive dust is proposed for systems that are rated at greater than 2000 cfm. The following table lists systems are currently at Auburn and if the rated flow rate is 2000 cfm or less:

Bldg.	*Col./Dr.*	*MSS/ ID#*	*Order of Approval #*	*Install Date*	*Source Description*	*Rated at 2000 cfm or less*
17-04	*D12; Door 10*	*57326*	*Reg.*	*1967*	*Dust Collector*	*N*
17-05	*K10*	*5896*	*Reg.*	*1966*	*Dust Collector*	*N*
17-05	*E16; Door 19*	*5936*	*1925*	*1979*	*Dust Collector*	*N*
17-05	*K10*	*5895*	*2530*	*1984*	*Dust Collector*	*N*
17-05	*K8*	*5894*	*2530*	*1984*	*Dust Collector*	*N*
17-06	*O/S; Door E14*	*9898*	*Reg.*	*1979*	*Dust Collector*	*N*
17-06	*O/S; Door E14*	*9899*	*Reg.*	*1979*	*Dust Collector*	*N*
17-06	*O/S; Door 31*	*61215*	*Reg.*	*1980*	*Dust Collector*	*N*
17-06	*Door 25-26*	*6092*	*2003*	*1979*	*Dust Collector*	*N*
17-06	*Door 25-26*	*6093*	*2003*	*1979*	*Dust Collector*	*N*
17-06	*Door E13*	*6120*	*2004*	*1979*	*Dust Collector*	*N*
17-06	*Door E13*	*6121*	*2004*	*1979*	*Dust Collector*	*N*
17-06	*Door E13*	*6122*	*2004*	*1979*	*Dust Collector*	*N*
17-06	*Door E13*	*6123*	*2004*	*1979*	*Dust Collector*	*N*
17-06	*Door E13*	*6125*	*2004*	*1979*	*Dust Collector*	*N*
17-06	*Door E13*	*6127*	*2004*	*1979*	*Dust Collector*	*N*
17-06	*O/S; Door E9*	*6132*	*2004*	*1979*	*Dust Collector*	*N*
17-06	*O/S; Door E9*	*6133*	*2004*	*1979*	*Dust Collector*	*N*
17-06	*O/S; Door E9*	*6134*	*2004*	*1979*	*Dust Collector*	*N*
17-06	*O/S; Door E9*	*6135*	*2004*	*1979*	*Dust Collector*	*N*
17-06	*Door E13*	*6126*	*2004*	*1979*	*Dust Collector*	*N*
17-06	*O/S E5; Door 7*	*60219*	*4686*	*1992*	*Dust Collector*	*N*
17-06	*O/S; Door 30*	*58618*	*4192*	*1991*	*Dust Collector*	*N*
17-06	*O/S; Door W31*	*58617*	*4192*	*1991*	*Dust Collector*	*N*
17-06	*O/S; Door W31*	*58389*	*4192*	*1991*	*Dust Collector*	*N*
17-06	*O/S; Door W31*	*58388*	*4192*	*1991*	*Dust Collector*	*N*
17-06	*D4*	*4071*	*5092*	*1993*	*Dust Collector*	*N*
17-06	*C23*	*4073*	*5092*	*1993*	*Dust Collector*	*N*
17-06	*C23*	*4074*	*5092*	*1993*	*Dust Collector*	*N*
17-06	*O/S; Door 37*	*12203*	*6742*	*1997*	*Mist Eliminator*	*N*
17-06	*O/S A6*	*12183*	*6777*	*1998*	*Dust Collector*	*N*
17-06	*C15*	*4075*	*6975*	*1997*	*Dust Collector*	*N*
17-06	*O/S; Door 25/26*	*12603*	*7177*	*1997*	*Dust Collector*	*N*
17-06	*O/S; Door 25/26*	*12604*	*7177*	*1997*	*Dust Collector*	*N*
17-06	*Door W28A*	*14828*	*7948*	*2000*	*Dust Collector*	*N*
17-06	*Door W25A*	*14829*	*7949*	*2000*	*Dust Collector*	*N*
17-06	*Door W25A*	*14830*	*7950*	*2000*	*Dust Collector*	*N*
17-07	*EE9/O*	*59077*	*4685*	*1992*	*Dust Collector*	*N*

Bldg.	*Col./Dr.*	*MSS/ ID#*	*Order of Approval #*	*Install Date*	*Source Description*	*Rated at 2000 cfm or less*
17-07	*EE10/O*	*60205*	*4685*	*1992*	*Dust Collector*	*N*
17-07	*EE11/O*	*60206*	*4685*	*1992*	*Dust Collector*	*N*
17-07	*EE9*	*64253*	*4687*	*1993*	*Dust Collector*	*N*
17-07	*O/S EE9*	*63616*	*6719*	*1997*	*Dust Collector*	*N*
17-07	*C1*	*3818*	*7183*	*1997*	*Dust Collector*	*N*
17-07	*O/S; B-11*	*13713*	*7613*	*1999*	*Dust Collector*	*Y*
17-07	*D-15*	*13675*	*7635*	*1998*	*Dust Collector*	*N*
17-10	*North side*	*64989*	*6115*	*1996*	*Dust Collector*	*N*
17-13	*North side*	*11485*	*6995*	*1998*	*Dust Collector*	*N*
17-45	*G2; 2nd Floor*	*55679*	*8029*	*1991*	*Dust Collector*	*N*
17-07	*Door W19*	*16186*	*8082*	*2000*	*Dust Collector*	*N*
17-68	*O/S F1/4.5; Door 7*	*8763*	*2876*	*1991*	*Dust Collector*	*N*
17-06	*O/S E24*	*6124*	*2005*	*1979*	*Baghouse (vents back to the bldg)*	*N*
17-07	*O/S EE9*	*58117*	*3805*	*1992*	*Baghouse (vents back to the bldg)*	*N*
17-07	*O/S EE9*	*64707*	*3805*	*1992*	*Baghouse (vents back to the bldg)*	*N*
17-05	*Door S21*	*58144*	*8302*	*2001 (NOC date)*	*Baghouse (vents back to the bldg)*	*N*
17-45	*A2: Mezz*	*55214*	*8029*	*1991*	*Particulate Scrubber*	*N*
17-45	*A2: Mezz*	*55215*	*8029*	*1991*	*Particulate Scrubber (salt bath)*	*N*
17-62	*B1*	*58323*	*5985*	*1992*	*Particulate Scrubber (salt bath rinse)*	*N*
17-66	*O/S; Door 9*	*61877*	*7591*	*1998*	*Dust Collector, QA Lab*	*Yes*

5. 3. 8. EU 8 - Abrasive Blasting Operations

This section includes all activities and equipment associated with abrasive blasting operations on production parts, tooling, or equipment. The following equipment in this section has been permitted under an Order of Approval. For the purpose of defining an emission unit in this permit, each piece of equipment is considered a separate emission unit.

Bldg.	*Col./Dr.*	*MSS/ ID#*	*Order of Approval #*	*Install Date*	*Source Description*	*Rated at 2000 cfm or less*
17-07	*EE9/O; Door 19*	*63461*	*4684*	*1992*	*Dust Collector*	*Y*
17-68	*B13*	*16511*	*3740*	*1991*	*Dust Collector*	*N*

Boeing uses abrasive blasting to clean tools and equipment parts and assembly and conducts the operation inside booths enclosures with particulate control equipment. Monitoring of the particulate control equipment is consistent with Section 5. 3. 7 EU 7 – Cyclones, Baghouses, and Other Particulate Control Operations. In addition, WAC 173-460-060(6) is a state only requirement that regulates work practices that govern how and where abrasive blasting can occur. Because these are work practices, the monitoring requirements are consistent with other work practices and as with most other work practices, the Puget Sound Clean Air Agency has inspected the facility at least annually for the last five years and has not identified violations.

5. 3. 9. EU 9 - Composite and Resin Processing Operations

This section includes all activities and equipment associated with composite and resin processing operations.

This process may include the use of styrene resin, which we consider is part of the aircraft manufacturing process. Hence, Puget Sound Clean Air Agency Regulation II, Section 3.08 applies. Section 3.08(b) requires that styrene resin be applied in an enclosed area that is registered with the Puget Sound Clean Air Agency. The section also requires that dry filters be used for controlling overspray, if the material is spray applied and that the exhaust from the operation is vented through a vertical stack. Boeing Auburn does not spray apply styrene resin in Auburn, hence the requirements in Section 3.08(b) and all of Section 3.08(c)-(e) for spray application do not apply. The amount of styrene resin used at Boeing Auburn is minor, less than 3,000 pounds per year, and is spread in many areas of Boeing Auburn. Because of these factors, Boeing requested an alternate means of compliance to conduct non-spray application of products containing styrene resin outside an enclosed area with a vertical stack. The Puget Sound Clean Air Agency approved the request under the authority of Regulation I, Section 3.23 with specific conditions as listed in the permit. Section 3.08(f) specifies requirements for controlling VOC emissions that include storage and disposal of the VOC containing materials in closed containers and tanks. Closed containers for rags or paper disposal are also

required. Such containers must remain closed unless being cleaned, or if materials are being added, mixed or removed. These requirements are independent of the application method and, therefore, apply to Boeing Auburn.

As with many other work practices, styrene resin applications occur throughout the Boeing Auburn facility at unscheduled times and do not lend themselves to normal compliance monitoring. Therefore, the Puget Sound Clean Air Agency has determined monitoring should be by quarterly work practices inspections; except if the styrene resin application causes an odor complaint, in which case Boeing will have to respond within three days as with other odor complaints. To date, the Puget Sound Clean Air Agency has not received complaints of styrene odor originating from Boeing Auburn.

5. 3. 10. EU 10 - 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. The gasoline station at the facility consists of a gasoline pump, a diesel pump, and two 10,000 gallon underground storage tanks for gasoline and diesel. Gasoline throughput at the station is less than 600,000 gallons annually.

Regulation II, Section 2.07(a)(2) requires the use of both stage 1 and stage 2 vapor recovery for all gasoline storage tanks with a capacity greater than 1000 gallons installed after August 2, 1992. The gasoline tank at Boeing Auburn was installed in 1989 and have not been modified since. Stage 2 would apply if the facility had a throughput greater than 600,000 gallons per year. This is not the case at the time of permit issuance. Hence, Regulation II, Section 2.07(b) applies and Section 2.07(c) does not apply.

Regulation II, Section 2.07 specifies inspections and their frequency, hence no gap filling is necessary. Regulation II, Section 2.07(b) requires installation of a CARB certified Stage 1 system with submerged fill and to visually inspect the Stage 1 system after each product delivery and to repair or replace any equipment found to be defective as soon as possible, but no later than 7 days after the inspection. At Boeing Auburn, deliveries occur on a weekly or less often basis (as opposed to daily deliveries typical at commercial gas stations). Inspections of the Stage 1 system after each product delivery may occur up to 7 days after delivery, but in all cases must be performed before the next product delivery. Boeing does not have to report finding defective equipment as a permit deviation as long as Boeing takes the appropriate corrective action. However, failure to take corrective action as described in the permit and must be reported under Section V.M Compliance certifications. or V.Q Reporting. of the permit. Boeing must also, under Regulation I, Section 7.09(b), keep a record of all inspections and actions required by its O&M Plan.

5. 3. 11. EU 11- Storage Tanks

This section consists of all activities and equipment associated with storage tank operations (except gasoline storage). The following tank in this section has been permitted under an Order of Approval. This tank was originally installed in 1966. It was relocated within the facility in 1987, with no modification to the structure. The tank held petroleum products both before and after the move. The Order of Approval for the relocation of the tank was approved by Puget Sound Clean Air Agency on March 23, 1987. For the purpose of defining an emission unit in this permit, the tank listed below is considered a separate emission unit.

Bldg.	*Col./Dr.*	*MSS/ID#*	*Order of Approval #*	*Install Date*	*Source Description*
17-09	*South of Bldg.*	*57664*	*2886*	*1966*	*430,000 gallons fuel oil storage tank*

This emission activity consists of tanks and activities associated with storing volatile organic liquids other than gasoline and diesel fuel. The tank was installed prior to July 23, 1984 so is not subject to the provisions of 40 CFR 60 Subpart Kb.

Therefore, no provisions of Subpart Kb apply. However, since the Puget Sound Clean Air Agency did issue an Order of Approval, the tank is subject to the state-only requirement to maintain the equipment in good working order, and RCW 70.94.152(7), applies.

5. 3. 12. EU 12 – Drying and Curing Operations

This section includes all activities and equipment associated with drying and curing operations. The following equipment in this section has been permitted under an Order of Approval. For the purpose of defining an emission unit in this permit, each piece of equipment is considered a separate emission unit.

Bldg.	*Col./Dr.*	*MSS/ID#*	*Order of Approval #*	*Install Date*	*Source Description*
17-05	*K10*	*8195*	*2218*		*Oven*
17-05	*A1*	*55833*	*3641*		*Oven*
17-07	*AA10*	*8183*	*2096*		*Oven*
17-62	*E16*	*58319*	*3842*		*Oven*
17-62	*E2*	*58320*	*3842*		*Oven*

The emission units in this activity consist of equipment and processes required for drying and curing aircraft parts. Most of the processes involve curing composites or coatings. The Puget Sound Clean Air Agency required a Notice of Construction Order of Approval for each of the pieces of equipment. Hence, they are subject to the state-only requirement to maintain the equipment in good working order (RCW 70.94.152(7)). However, there are no specific emission standards or work practice requirements for these units.

5. 3. 13. EU 13 – Wood Furniture

This section consists of wood furniture manufacturing activities. These activities have are subject to 40 CFR Part 63 Subpart JJ National Emission Standards for Wood Furniture Manufacturing Operations. This subpart applies the major HAP sources that manufacture wood furniture. Boeing is a major source of HAP emissions and manufactures some wood furniture. However, Boeing is primarily engaged in manufacturing aircraft and aircraft parts, not wood furniture or wood furniture components. 40 CFR 63.801 defines "Incidental wood furniture manufacturer" as a major source that is primarily engaged in the manufacture of products other than wood furniture or wood furniture components and that uses no more than 100 gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components. Boeing Auburn is such a source. 40 CFR 63.800(a) requires that a source that meets the definition for an incidental furniture manufacturer shall maintain purchase or usage records demonstrating the source meets the definition in 40 CFR 63.801 40 CFR 63.801, but the source shall not be subject to any other provisions of 40 CFR 63 subpart JJ. Hence, Boeing must maintain purchase or usage records demonstrating that it uses no more than 100 gallons per month of finishing material or adhesives in the manufacturing of wood furniture or wood furniture components.

5. 3. 14. EU 14 - NO2 and H2S scrubbers

This section includes all activities and equipment associated with NO2 and H2S scrubbers. The following equipment in this section has been permitted under a Notice of Construction or has otherwise been registered with the Puget Sound Clean Air Agency. For the purpose of defining an emission unit in this permit, each piece of equipment is considered a separate emission unit.

Bldg.	*Col./Dr.*	*MSS/ID#*	*Order of Approval #*	*Install Date*	*Source Description*
17-62	*O/S East, Door 20*	*17145*	*8542*	*2002*	*NO2 Scrubber*
17-62	*O/S East, Door 20*	*17146*	*8542*	*2002*	*H2S Scrubber*
17-68	*O/S; Door 30*	*17376*	*8543*	*2002*	*NO2 Scrubber*
17-68	*O/S; Door 30*	*17377*	*8543*	*2002*	*H2S Scrubber*

The monitoring methods are specifically listed in the Order of Approval and no addition monitoring is necessary, hence no changes in monitoring.

5. 4 Operations without Specific Applicable Requirements

This emission activity consists of any equipment and associated activities that generate air contaminants that do not have specific applicable requirements as listed elsewhere in this permit.

Boeing may conduct operations at Boeing Auburn that do not have specific applicable requirements but are still subject to the generally applicable requirements listed in Section I.A. of the permit. Most of those activities are listed under this emission unit. Boeing requested that the Puget Sound Clean Air Agency include this emission unit to ensure that these activities are listed in the permit and protected by the permit shield. The Puget Sound Clean Air Agency concluded that the permit contains all the applicable requirements elsewhere in the permit and recognizes that Boeing may conduct these activities. By listing these emission units and activities, the Puget Sound Clean Air Agency is not implying that the other requirements of the permit do not apply. For example, if Boeing were to modify an activity, listed in this emission activity, in such a way that required new source review under Section IV.A. of the permit, the Puget Sound Clean Air Agency would require a Notice of Construction.

Cold solvent cleaners using a solvent with a true vapor pressure less than or equal to 4.2 kPa (0.6psia) are Operations without Specific Applicable Requirements and are not subject to the requirements of Regulation III, Section 3.05. In addition, solvent tanks used to remove paint and other coatings, such as resins, are not solvent metal cleaners subject to Regulation III, Section 3.05.

5. 5 Inapplicable Orders of Approval

The following Order of Approval is no longer applicable to Boeing Auburn for the following reasons.

Order of Approval	Description	Reason
7454	General Regulatory Order extension of one year, until September 1, 1999 for some NESHAP coating requirements.	Expired

6. Monitoring, Maintenance and Recordkeeping Procedures

The 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(iii) of the permit. Hence, Boeing is not required to provide Puget Sound Clean Air Agency with advance notification of the most monitoring even if that monitoring is a reference method like Ecology Method 9A. For example, if Boeing observed visible emissions and then performed a Method 9 observation, the results of that observation can be used to demonstrate compliance test even if Boeing did not notify the Agency.

Many of the procedures in Section II of the permit are grouped according to types of activities or the Boeing organizational unit responsible for performing the procedure. For example, the activities in Section II.A.2(d) Equipment Maintenance are normally performed by maintenance personnel while the other activities in Section II.A of the permit are normally performed by operators or environmental staff. For example,

maintenance staff checks to see that the pressure drop gauge on a spray booth is operating properly and that the acceptable ranges are marked, but the operator is responsible for logging the pressure drop.

6. 1 Following Monitoring, Maintenance and Recordkeeping Procedures

Boeing 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 must report such violations, 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 from its obligation to comply with the underlying applicable requirement.

6. 2 Order of Approval Standard Approval Conditions

A standard Puget Sound Clean Air Agency Notice of Construction Order of Approval condition, Condition No. 1, requires that the equipment, device or process be installed according to plans and specifications submitted to the Puget Sound Clean Air Agency. Once the equipment is installed, the Puget Sound Clean Air Agency 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 Puget Sound Clean Air Agency inspector verifies by inspection that the equipment was installed as specified and in accordance with the Order of Approval. While the Notice of Completion is a one-time requirement that Boeing has complied with, Boeing cannot change the approved equipment in such a manner that requires an NOC Order of Approval without first obtaining an NOC Order of Approval 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 develop and implement an Operation and Maintenance Plan for the equipment approved. The Clean Air Agency considers that condition obsolete and superceded by Regulation I, Section 7.09(b) which requires development of an Operation and Maintenance 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. 3 Work Practice Inspections

The permit requires Boeing to conduct quarterly work practice inspections. These inspections are to ensure that the work practices required by the permit are being followed. The Puget Sound Clean Air Agency determined the frequency of these inspections after considering the potential for emissions, the lack of federally required monitoring, Boeing in-house training practices and similar factors. If problems are identified, Boeing has the responsibility to make a record of the problem, correct the specific problem, and adjust the work practices and training to prevent future problems.

6. 4 Monitoring Frequency

In determining the appropriate monitoring frequency, the Puget Sound Clean Air Agency considered several factors including the following:

- Boeing'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 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. 5 Operation and Maintenance (O&M) Plan Requirements

Boeing's O&M Plan shall include equipment operation and maintenance procedures specifying how Boeing will assure continuous compliance with Puget Sound Clean Air Agency Regulations I, II and III. The issue of what must be included in the O&M Plan has been the subject of some discussion between the Puget Sound Clean Air Agency and Boeing. In an April 17, 2001 letter (Attachment B) to R. Hess at Puget Sound Clean Air Agency, B. Thompson of Boeing clarified Boeing's O&M Plans need only address equipment operation and maintenance and that work practices can be maintained elsewhere. In a May 1, 2001 letter (Attachment C) to Barbara Thompson, Rick Hess confirmed that understanding.

7. Prohibited Activities

Some of the requirements Boeing 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, the Puget Sound Clean Air Agency has listed these activities in this section to highlight that they cannot occur at the facility. Personnel that perform the facility-wide 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.

7. 1 Requirement III.B Open Burning

Puget Sound Clean Air Agency Regulation I, Article 8 prohibits most open burning in most areas within the Agency's jurisdiction. However, Regulation I, Section 8.07 specifically allows fire extinguisher training under certain conditions.

7. 2 Requirement III.D & E Concealment and Masking

Puget Sound Clean Air Agency Regulation I, Section 9.13, and WAC 173-400-040(7) contain similar requirements addressing concealment and masking of emissions. Although the effective dates for the federally enforceable and the state-only versions of WAC 173-400-040(7) differ, the actual wording of the two versions are the same.

8. Activities Requiring Additional Approval

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

8. 1 Requirement IV.A New Source Review

For new source review, the permit language has been simplified. Chapter 173-460 WAC (State-Only) and Puget Sound Clean Air Agency Regulation I, Article 6 New Source Review Programs require approval to construct, install, establish, or modify an air contaminant source. All these requirements apply, but the language in these requirements has been incorporated into one section to simplify the permit language. WAC 173-400-110 applies statewide, yet defers to local authority programs which provide the same, equivalent function. Since Puget Sound Clean Air Agency has had a New Source Review Program under Regulation I, Article 6 for many years, the regulatory program used to review activities for this purpose is that Regulation and not the statewide version managed by the Washington Department of Ecology. New and modified sources are required to apply Best Available Control Technology (BACT), and BACT is defined to include all requirements in the NSPS and NESHAP. Therefore, the NESHAP requirements for new and reconstructed sources (procedural requirements included in the general provisions in 40 CFR 63.5) are covered by this language as are the requirements in 40 CFR 60.7, 60.14, and 60.15.

The recently amended Puget Sound Clean Air Agency Regulation I, 6.03(c) exempts certain equipment from new source review. It does not exempt any equipment from any federally required new source review or federally required notifications. For purposes of complying with the recordkeeping requirement in Puget Sound Clean Air Agency Regulation I, 6.03(c), Boeing 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 oftentimes 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. (see Attachment D), E-mail, dated September 14, 2001, S. Van Slyke to B. Thompson, New NOC Rule Interpretation).

8. 2 Requirement IV.D Spray Coating

Both the 1993 federally enforceable version and the current version of Regulation I, Section 9.16 are included in the permit. However, the two versions differ enough that Boeing could only comply with one. Therefore, the Puget Sound Clean Air Agency will only enforce the current version.

9. Standard Terms and Conditions

Some of the requirements Boeing identified in the operating permit application are included in Section V, Standard Terms and Conditions. This provided an easier mechanism for describing requirements that are more general in nature. This section also contains the standard terms and conditions specifically listed in WAC 173-401-620.

9. 1 V. O Recordkeeping

WAC 173-401-615(2) requires maintain a record of the time that each sample or measurement is taken. If the sample or measurement needs to be recorded once a shift or less frequently, then Boeing needs to identify the shift that the sample or measurement was take. If sample or measurement needs to be recorded more frequently than once a shift, then Boeing must record the hour that the sample or measurement was taken.

9. 2 V. P Data recovery

Some of the applicable requirements in the permit did not have specific monitoring requirements associated with them. For such requirements, the Puget Sound Clean Air Agency developed monitoring requirements. (This is sometimes called gap filling.) Section V.P Data recovery addresses the amounts of data recovery required for these monitoring requirements that were developed specifically for the permit. The section also address procedures to follow if the monitoring system fails or data is lost. The requirements of the section only apply as noted in Section II of the permit and under no circumstances does this section apply if a specific underlying applicable requirement is more stringent.

In developing the data recovery requirements, the agency considers similar data recovery requirements such as Regulation I, Section 12.03, the frequency of the monitoring, and the nature of the information required to monitor. For monitoring that the permit requires on a quarterly or less frequent basis, the data recovery requirements are 100%.

9. 3 V. Q Reporting

Section V.Q lists the reports that Boeing must submit, and the responsible official that must certify the report. In many cases, Puget Sound Clean Air Agency used its authority under 40 CFR 60.7 and 40 CFR 63.10 to adjust the reporting dates and reporting frequencies to be consistent with other reporting requirements. For example, Puget Sound Clean Air Regulation I, Section 12.03(f) requires all continuous emissions monitoring reports to be submitted to the Agency within 30 days after the end of each calendar month. However, 40 CFR 60.7(c) requires such reporting semiannually unless the administrator determines that more frequent reporting is necessary. The Puget Sound Clean Air Agency rule clearly requires more frequent reporting, and the reports are similar. In addition, WAC 173-401-615(3)(b) specifically requires monthly reporting of all deviations. Rather than Boeing submitting two or three different reports with the same information at different times, the Agency determined that more frequent reporting of the federal requirement is warranted.

Section V.Q.1(b) requires that Boeing report deviations within 30 days after the end of the month in which the deviation is discovered. In this context a deviation is "discovered" when Boeing has investigated a potential deviation and has reasonable certainty that a deviation occurred.

Similarly, 40 CFR 63.753 requires certain deviation reporting semiannually, normally on September 30 and May 30. However, 40 CFR 63.9(i) allows Puget Sound Clean Air Agency to adjust the reporting date. In this case, the Puget Sound Clean Air Agency requires the semiannual report by August 30th for the reporting period of January through June and by February 28th for the reporting period of July through December. In addition the permit requires monthly reporting of all deviations. Those deviation reports contain different information and are not intended to be a substitute for the semiannual or annual reports.

Section V.M.2(e) Startup, Shutdown, and Malfunction Reports requires Boeing to report certain startup, shutdown and malfunctions. After reviewing the requirements of 40 CFR 63.6 and 63.10, the Puget Sound Clean Air Agency has determined that such reports are only required if the startup, shutdown or malfunction resulted in excess emissions. In addition, 40 CFR 63.10(d)(5)(ii) allows the permitting authority to make alternative reporting arrangements. For example, in this case Puget Sound Clean Air Agency established an alternative reporting arrangement for the Immediate Startup, Shutdown, and Malfunction Reports, for the Aerospace NESHAP, to be consistent with other deviation reports.

10. 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.

11. Public Comments and Responses

The Puget Sound Clean Air Agency received two public comments, both from the Boeing Company.

11. 1 Boeing Comment of July 26, 2002

July 26, 2002
A-1320-ENV-02-084

Mr. Jay Willenberg
Puget Sound Clean Air Agency
110 Union Street, Suite 500
Seattle, WA 98101-203

Dear Mr. Willenberg:

Subject: Comments to the Boeing Auburn draft Air Operating Permit and Statement of Basis

The purpose of this letter is to provide comments to the Boeing Auburn Draft Air Operating Permit and Statement of Basis. In addition to the comments provided below, we are enclosing a copy of the sections of the permit with our proposed changes.

We also incorporate herein by reference all of our previous comments submitted on the earlier drafts of this permit.

Draft Operating Permit Comments

Section I Emission Limits and Performance Standards

Page 13: The date is 1998 instead of 1999.

Response: *Date corrected.*

Page 16: Scrubbers for the chemical milling tankline are also listed under this emission unit (EU). There are no Aerospace NESHAP (ANESHAP) requirements for these

scrubbers. ANESHAP applies to chemical milling maskant and not the chemical milling operation itself.

Response: *The description of the emission unit has been changed to exclude the processes regulated elsewhere in the permit.*

Page 17: Corrected a typo. Added one more Monitoring, Maintenance & Recordkeeping Method to EU 1.2.

Response: *Added the Monitoring, Maintenance & Recordkeeping Method to both EU 1.2 and the new EU 1.4.*

Page 19: Corrected the Monitoring, Maintenance & Recordkeeping Methods for EU 1.11 and EU 1.12.

Response: *Corrections made.*

Page 21: Inserted a memo.

Response: *Memo inserted.*

Page 22: Corrected the EU name. Equipment MSS# 57163 is removed.

Response: *Name corrected and equipment removed.*

Page 30: Corrected a typo.

Response: *63.750(c)-(h) and (k)-(m) changed to (k)-(n).*

Page 41: Added ANESHAP citation for the waterborne coatings.

Response: *Added "as provided by 40 CFR 63.741(i)" after waterborne coatings.*

Page 44: Corrected the dates.

Response: *Corrected date and added the federally enforceable requirement.*

Page 50: NOC Order of Approval #6756 condition No.4 limits the VOC content to be less than 1% by weight instead of 0.001 lb/gal. 1% by weight isn't necessarily equivalent to 0.001 lb/gal.

Response: *Correction made.*

Page 57: The equipment MSS #58939 is removed.

Response: *Equipment removed.*

Page 60: Corrected the dates.

Response: *Date corrected and both the current and the federal enforceable requirements are listed.*

Page 61: We are required to maintain a list of coatings that are used on site and update this list at least annually. Having the document in place demonstrating that the VOC content is within the regulatory limit should be sufficient.

Response: *Having a list of coatings and using only that list of coatings are very different. It is reasonable to verify occasionally, that the correct coatings are actually the ones used; hence, the method was retained.*

Page 65: Corrected the boiler reference.

Response: *Corrected the reference and referred to the specific boilers.*

Page 71: Added the dates.

Response: *Date corrected and both the current and the federal enforceable requirements listed.*

Page 79: Corrected the name to reflect that the unit is a pretreatment plant.

Response: *Name corrected.*

Page 82: We are currently operating less than 1 megagram of HAP per year. Therefore, this scenario is our normal operating scenario instead of the alternative operating scenario.

Response: *Wording changed to reflect the normal operation at the time of permit issuance.*

Page 87: Work Practice Inspection monitoring method is sufficient to satisfy this applicable requirement.

Response: *Deletion made.*

Page 88: Work Practice Inspection monitoring method is sufficient to satisfy this applicable requirement.

Response: *Deletion made.*

Page 92: Corrected typos.

Response: *Correction made.*

Page 94: Added the location information.

Response: *Addition made.*

Page 94: Corrected the dates.

Response: *Date corrected and both the current and the federal enforceable requirements listed.*

Page 96: Corrected the date.

Response: *Date corrected and both the current and the federal enforceable requirements listed.*

Page 99: Corrected the date.

Response: *Date corrected and both the current and the federal enforceable requirements listed.*

Page 100: Corrected the date.

Response: *Date corrected and both the current and the federal enforceable requirements listed.*

Page 101: Corrected the date.

Response: *Date corrected and both the current and the federal enforceable requirements listed.*

Page 102: Corrected the source information.

Response: *Corrections made.*

Page 108: This is included under the Wastewater Pretreatment Operations.

Response: *Deletion made.*

Page 109: Corrected the source information.

Response: *Change made.*

Section II Monitoring, Maintenance and Recordkeeping

Page 113, 119, 120, 122 & 126: Checking for visible emission is not an official Ecology Method 9A test. "Observations for visible emissions shall be made at 15 seconds intervals" language adds confusion to these monitoring methods, therefore, we request that the Agency deletes them from the permit.

Response: *Change made as part of the Boeing Puget Sound Clean Air Agency Settlement Agreement.*

Page 114: Added language to clarify that visible emission does not apply to water vapor.

Response: *Change made as part of the Boeing Puget Sound Clean Air Agency Settlement Agreement.*

Page 116: Since this monitoring method applies only to the applicable requirements related to fugitive dust, track-out, and odor bearing contaminants, changed the word "permit" to "section II.A.2(f)" to avoid any potential confusion.

Response: *Change made as part of the Boeing Puget Sound Clean Air Agency Settlement Agreement.*

Page 121, 124: Gauge marking may fade or fall off over time. The proposed language would allow us to fix the problem within 24 hours upon discovery.

Response: *While observing the required gauge, the operator should note if the marking is fading or ready to fall off. No changes made.*

Page 123: We agreed on 7 to 11 for the Frederickson site's permit. The same principle would apply here as well.

Response: *Change made.*

Page 127: Wet particulate scrubber MSS# 55214 does not have any spray nozzles. It's a "Whirl Wet" system that works like a washing machine to collect particulates. Water flow rate is also not a good indicator of the equipment performance. We propose monitoring the pressure differential across this scrubber.

Response: *Change made.*

Page 128: Added headings to avoid confusion.

Response: *Change made.*

Page 132: Added a clarification as to what constitutes a "3-stage" filter.

Response: *Change made.*

Page 134: We keep track of the monthly material "purchased" data instead of monthly material "used" data. We cannot use more than what we purchased. Therefore, we feel that the material purchased data should be more conservative than the material used data.

Response: *The definition of Incidental wood furniture manufacturer in 40 CFR 63.801 clearly says "uses no more than 100 gallons per month…" No change made.*

Section V Standard Terms and Conditions

Page 144: We request that the first sentence of the V.O.1.4. be deleted for the following reasons:

1. Keeping records of all required monitoring information is already being addressed under V.O.1.1 to V.O.1.3. as authorized under WAC 173-401-615(2).
2. Boeing will keep records of all inspections, tests, and other actions required by the O&M Plan and Section II.A.2. of this permit. This is consistent with the PSCAA Regulation I, Section 7.09(b) that requires a record of all actions required by the (O&M) plan.
3. Keeping records of all inspections, tests and other actions required by Section II.A.1. of this permit creates extremely burdensome recordkeeping requirement and one that is not required by the underlying AOP recordkeeping requirement under WAC 173-401-615 or the O&M recordkeeping requirement under PSCAA Regulation I, 7.09. For example, the Work Practice Inspection under II.A.1(d) requires that potential work practice compliance problems identified during the quarterly inspections *or any other time* be corrected within 24 hours or the unit or activity shut down until the problem can be corrected. The first sentence of Section V.O.1.4. could be interpreted to mean that any time an employee corrects a potential work practice compliance problem, the employee must make a record of the corrective action. It could also be interpreted to mean that any time an employee closes an open solvent container or places a solvent rag in a closed bag, the employee must make a record of the action. Having thousands of employees expected to keep such records would be an extremely burdensome recordkeeping requirement for the Boeing Company.

Response: *Change made as part of the Boeing Puget Sound Clean Air Agency Settlement Agreement.*

Page 145 & 146: For consistency, added a couple of more items.

Response: *The Agency applied the Data Recovery provision where gap filling was necessary to address the monitoring requirements of Title V. The wording in*

Orders of Approval #8029, 8542, and 8543 is clear about the required monitoring and no gap filling is required.

Page 151: Corrected a typo.

Response: *Correction made.*

Statement of Basis Comments

Page 10: A few more CSR's are missing.

Response: *Updated.*

Page 12: Corrected a date.

Response: *The 1993 date is technically correct. The agency only checked records for the last ten years.*

Page 16: Added a clarification as to the type of fuel oil burned at our site.

Response: *Change made.*

Page 16 & 18: To clarify that the facility inspection shall include a representative sample each quarter but that representative sample should not be the same each quarter.

Response: *Change made.*

Page 20: Scrubbers for the chemical milling are included in this EU.

Response: *Change made.*

Page 22: Corrected a date.

Response: *Date changed.*

Page 23: Equipment is removed.

Response: *Change made.*

Page 24: Corrected an Order of Approval number.

Response: *Correction made.*

Page 34: Added only fuel burning equipment addressed under this EU. Corrected the date.

Response: *Clarified that the comments only apply to equipment that monitoring method applies to.*

Page 36: Corrected the information.

Response: *Clarified that the comments only apply to equipment that monitoring method applies to.*

Page 37: Corrected the information.

Response: *Clarified that that the emission unit is a pre-treatment unit and added to current operating rate.*

Page 43: The tank was originally installed in 1966. It was relocated within the facility in 1987 with no modification to the structure. The tank held petroleum products both before and after the move.

Response: *Change made and clarified that the tank is not subject to the NSPS.*

Page 44: Missing EU 14 NO2 and H2S Scrubbers information.

Response: *Information added.*

Page 44: Please add this clarification to the Statement of Basis (see the letter dated January 16, 2002 from Steve M. Van Slyke, Puget Sound Clean Air Agency to Neva Welch, the Boeing Company).

Response: *Added.*

Please let me know if you would like to meet with us to discuss these comments before you finalize the permit. If you have any questions regarding our comments, please contact Jade Hudson at (253) 931-4182.

Sincerely,

Edward J. Cierebiej
Manager, Environmental Affairs
Fabrication Division
A-1320 M/C 5R-14
(253) 931-3734

Enclosure

11. 2 Boeing Comment of July 29, 2002

July 29, 2002
A-1320-ENV-02-085

Mr. Jay Willenberg
Puget Sound Clean Air Agency
110 Union Street, Suite 500
Seattle, WA 98101-203

Dear Mr. Willenberg:

Subject: Additional Boeing Comments to the Boeing Auburn Draft Air Operating Permit

Attached please find additional Boeing comments to the Boeing Auburn Draft Air Operating Permit. If you have any questions regarding these comments, please contact the undersigned.

Sincerely,

Edward J. Cierebiej

Section II.A.1(a) of the Draft AOP which requires, among other things, that Applicant undertake opacity monitoring activities "any … time" any visible emissions are observed, and, under certain circumstances, to repair equipment until operation with no visible emissions is achieved, is unjust and unlawful.[2] It is arbitrary and capricious, and goes beyond the legal authority of PSCAA. The sole authority for Section II.A.1(a) of the Draft AOP is WAC 173-401-615(b) which only authorizes the imposition of "periodic monitoring."[3] By mandating monitoring of visible emissions "any … time"

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[2] Section II.A.1(a) of the Draft AOP provides, in relevant part:

(a) Opacity Monitoring. Boeing shall conduct visible emission inspections of the facility at least once per calendar quarter. Inspections are to be performed while the facility is in operation during daylight hours. If during a quarterly visible emissions inspection,* or any other time*, 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 either; take corrective action, which may include shutting down the unit or activity until it can be repaired, until there are *no visible emissions*; or, alternatively, record the opacity using the reference test method or

- Continue the observation 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 made 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, Boeing shall, as soon as practicable but within 24 hours of the initial observation either; take corrective action, which may include shutting down the unit or activity until it can be repaired, until there are *no visible emissions*; or, alternatively, record the opacity using the reference test method.

(emphasis added)

[3] WAC 173-401-615(b) provides, in relevant part:

(1) Monitoring. Each permit shall contain the following requirements with respect to monitoring:

***

(b) Where the applicable requirement does not require periodic testing or instrumental or non-instrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), *periodic monitoring* sufficient to yield reliable

they happen to be observed, Section II.A.1(a) of the Draft AOP imposes a continuous or otherwise non-periodic monitoring method - without legal authority. Section II.A.2 (d)(viii) of the Draft AOP (Wet Particulate Scrubber) is also invalid because of its use of the "any … time" language.

Additionally, by mandating that emission units or activities that the Applicant shuts down for the correction of visible emissions problems be "repaired" "until there are no visible emissions," Section II.A.1(a) of the Draft AOP impermissibly imposes a substantive emission limitation more stringent than that contained in the relevant applicable requirements (e.g., PSCAA Reg. I, Section 9.03, which allows emissions up to 20% opacity). WAC 173-401-100(2) plainly indicates that AOPs cannot impose new substantive requirements.[4] Section II.A.2(d)(iii) of the Draft AOP (Fuel Burning Equipment), Section II.A.2(d)(v) of the Draft AOP (Cyclones, Baghouses, and Abrasive Blast Booths), Section II.A.2(d)(vi) of the Draft AOP (Scrubber for Metal Finishing Tankline), and Section II.A.2(d)(viii) of the Draft AOP (Wet Particulate Scrubber) are also invalid because they include the "no visible emissions" language.

Because of the special skills and time that could be required to carry-out the monitoring mandated under Section II.A.1(a) of the Draft AOP and Section II.A.2(d)(viii) of the Draft AOP, and because of the significant expense that could be involved in achieving "no visible emissions" as purportedly mandated, under certain circumstances, by Section II.A.1(a) of the Draft AOP, Section II.A.2(d)(iii) of the Draft AOP, Section II.A.2(d)(v) of the Draft AOP, Section II.A.2(d)(vi) of the Draft AOP, and Section II.A.2(d)(viii) of the Draft AOP, these visible emissions monitoring requirements are unduly burdensome, wasteful and inefficient. For example, the Draft AOP appears to require continuous or frequent (e.g., daily) reference method opacity testing, or achieving no visible emissions of even "steady-state" emissions and despite the availability of prior representative data reliably indicating that the emissions are in compliance with all applicable opacity standards.

Therefore, the PSCAA should re-write the periodic monitoring requirements for those emissions units and activities at the Auburn facility that would otherwise be subject to Section II.A.1(a) of the Draft AOP, Section II.A.2(d)(iii) of the Draft AOP, Section II.A.2(d)(v) of the Draft AOP, Section II.A.2(d)(vi) of the Draft AOP, and Section II.A.2(d)(viii) of the Draft AOP. These monitoring requirements should:

> data from the relevant time period that are representative of the source's compliance with the permit, as reported pursuant to subsection (3) of this section. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement. Recordkeeping provisions may be sufficient to meet the requirements of this paragraph … .

(emphasis added).

[4] WAC 173-401-100(2) provides, in relevant part: "While chapter 173-401 WAC *does not impose substantive new requirements,* it does require … that certain procedural measures be adopted especially with respect to compliance." (emphasis added). *See also* 40 CFR 70.1(b).

i. Be periodic. For example, there should be no requirement to undertake any monitoring activity based on any event or circumstance occurring at "any … time."

ii. Be of a reasonable frequency. For example, monitoring under Section II.A.1(a) of the AOP should be required no more frequently than quarterly.

iii. Be efficient. For example, regarding visible emissions monitoring, if the Applicant has previously collected and recorded valid reference method testing data representative of the conditions under which a unit or activity is operating when visible emissions are observed during a periodic monitoring event, no further monitoring (e.g., reference method testing) should be required.

iv. Be substantively neutral. For example, with regard to visible emissions monitoring under Section II.A.1(a) of the Draft AOP, Section II.A.2(d)(iii) of the Draft AOP, Section II.A.2(d)(v) of the Draft AOP, Section II.A.2(d)(vi) of the Draft AOP, and Section II.A.2(d)(viii) of the AOP, the resumption of the operation of a unit or activity that Applicant has shut down for correction of visible emissions problems should be allowed under any circumstances upon a demonstration, using the reference method, that the unit or activity can operate in compliance with all applicable opacity requirements. Achieving results better than required by all applicable opacity standards cannot be required.

11. 3 Agency Response to Boeing Comment of July 29, 2002

From June 29, 2002 to July 29, 2002, the Puget Sound Clean Air Agency held a public comment period for a Draft Air Operating Permit for Boeing Auburn. The Puget Sound Clean Air Agency chose not to issue Proposed Air Operating Permit for Boeing Renton because Boeing was appealing an air operating permit with similar wording and Boeing raised similar concerns in their comments of July 29, 2002.

The Puget Sound Clean Air Agency issued the air operating permit for Boeing Commercial Airplane Group's - North Boeing Field/Plant 2 facility (No. 21147) on May 20, 2002, after the 30 day pubic comment period and the 45 day EPA review period. On June 19, 2002, Boeing submitted to the Pollution Control Hearings Board (PCHB) a Notice of Appeal and Request for Stay of Effectiveness of Challenged Provisions and a Motion for Stay of Proceedings, pertaining to the air operating permit for NBF/Plant 2 (PCHB No. 02-84). Of specific concern to Boeing was language in the opacity monitoring method Section II.A.1(a) of the permit, and sections with similar wording. The wording in question in the NBF/Plant 2 air operating permit was very similar to that in the Boeing Auburn Draft Air Operating Permit. Puget Sound Clean Air Agency chose to postpone issuing the Boeing Auburn air operating permit until after Boeing and the Agency concluded discussions on a settlement agreement. A settlement agreement was signed on January 5, 2003. As part of the settlement agreement the Puget Sound Clean Air Agency agreed to reopen the permit for cause under Section VI. F Reopening for

Cause and WAC 173-401-730, and propose agreed upon changes to address Boeing's concerns.

Because of the settlement agreement the Agency is also proposing similar changes to the as-yet un-issued Boeing Auburn Air Operating Permit. In addition, the Agency is proposing other primarily administrative type changes to the Boeing Auburn Air Operating Permit; such as, including recent changes to applicable regulations and Notice of Construction Orders of Approval that the Agency has recently issued. The Agency also has made administrative changes relating the numbering system and cross-references. Because the Agency has not issued the Boeing Auburn permit, these changes are not permit amendments; instead, the agency is issuing a new draft permit and accepting public comments on it. Below is a description of the proposed changes that are a result of the settlement agreement.

11. 3. 1. Changes to Air Operating Permit Section I

- Requirement I.A.1 –Addition of II.A.1(b) Complaint Response and II.A.1(c) Facility Inspections to Monitoring, Maintenance, and Recordkeeping (MM&R).

- Requirement I.A.2 – Modification of the WAC 173-400-060 requirement to describe both the federally enforceable and state-only enforceable parts of the requirement.

- Requirement I.A.2 – Addition of II.A.1(b) Complaint Response and II.A.1(c) Facility Inspections to MM&R.

- Requirement I.A.3 – Addition of II.A.1(b) Complaint Response and II.A.1(c) Facility Inspections to MM&R.

- Section I.B first paragraph – Changed the second sentence to read *"If a requirement in Section I.A. is repeated in this section, then the monitoring, maintenance, and recordkeeping method specified in this section supersedes the monitoring, maintenance, and recordkeeping method specified in Section I.A.."* The permit notes places where a monitoring method in Section I.A is superseded. Also deleted *"If the monitoring, maintenance and recordkeeping method for any requirement in Section I.A. is more extensive for specific emission units, the requirement is repeated in this section with the additional monitoring, maintenance and recordkeeping requirements."*

- Requirement EU 1.1 – Clarified that the 9/10/98 version of Regulation I, Section 7.09(b) will become federally enforceable upon adoption into the SIP. Also, clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 7.09(b) requirement listed in I.A.10.

- Requirement EU 1.2 – Clarified that Regulation I, Section 9.20(a) only applies to equipment that has received an NOC Order of Approval. Added II.A.1(c) Facility Inspections to the MM&R.

- Requirement EU 1.3 – Added II.A.1(c) Facility Inspections to the MM&R.

- Requirement EU 1.4 – Added Regulation I, Section 9.03 and WAC 173-400-040(1) as applicable requirements and identified the monitoring methods.

- Requirement EU 2.91 – Clarified that the 9/10/98 version of Regulation I, Section 7.09(b) will become federally enforceable upon adoption into the SIP. Also, clarified that the monitoring method supersedes the monitoring method for this requirement listed in I.A.10.

- Requirement EU 2.92 – Added II.A.1(c) Facility Inspections to the MM&R. Also, clarified that the monitoring method supersedes the monitoring method for this requirement listed in I.A.9.

- Requirement EU 3.6 – Clarified that the 9/10/98 version of Regulation I, Section 7.09(b) will become federally enforceable upon adoption into the SIP. Also, clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 7.09(b) requirement listed in I.A.10.

- Requirement EU 3.7 –Added II.A.1(c) Facility Inspections, to MM&R. Also, clarified that the monitoring method supersedes the monitoring method for this requirement listed in I.A.10.

- Requirement EU 4.23 – Added II.A.1(b) Complaint Response and II.A.1(c) Facility Inspections to the MM&R and clarified that the monitoring method supersedes the monitoring method in I.A.1.

- Requirement EU 4.24 – Added II.A.1(b) Complaint Response and II.A.1(c) Facility Inspections to the MM&R and clarified that the monitoring method supersedes the monitoring method in I.A.3.

- Requirement EU 4.25 – Added II.A.1(b) Complaint Response and II.A.1(c) Facility Inspections to the MM&R.

- Requirement EU 4.28 – Clarified that the 9/10/98 version of Regulation I, Section 7.09(b) will become federally enforceable upon adoption into the SIP. Also, clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 7.09(b) requirement listed in I.A.10.

- Requirement EU 4.29 – Clarified that the requirement applies to equipment that has received an NOC Order of Approval and added II.A.1(c) Facility Inspections to the MM&R.

- Requirement EU 5.1 – Added II.A.1(b) Complaint Response and II.A.1(c) Facility Inspections to the MM&R and clarified that the monitoring method supersedes the monitoring method in I.A.1.

- Requirement EU 5.2 – Added II.A.1(b) Complaint Response and II.A.1(c) Facility Inspections to the MM&R and clarified that the monitoring method supersedes the monitoring method in I.A.3.

- Requirement EU 5.3 – Added II.A.1(b) Complaint Response and II.A.1(c) Facility Inspections to the MM&R.

- Requirement EU 5.5 – Clarified that the 9/10/98 version of Regulation I, Section 7.09(b) will become federally enforceable upon adoption into the SIP. Also, clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 7.09(b) requirement listed in I.A.10.

- Requirement EU 5.6 – Clarified MM&R as II.A.1(c), facility inspections. Also, clarified that the monitoring method supersedes the monitoring method in I.A.9.

- Requirement EU 6.18 – Clarified that the 9/10/98 version of Regulation I, Section 7.09(b) will become federally enforceable upon adoption into the SIP. Also, clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 7.09(b) requirement listed in I.A.10.

- Requirement EU 6.19 – Added II.A.1(c) Facility Inspections to the MM&R and clarified that the monitoring method supersedes the monitoring method listed in I.A.9.

- Requirement EU 7.1 – Added both the current and the SIP versions of Regulation I, Section 9.03 and WAC 173-400-040(1) the appropriate MM&R, and the Reference Method. Also, clarified that the monitoring method supersedes the monitoring method in I.A.1.

- Requirement EU 7.2 – Added both the current and the SIP versions of Regulation I, Section 9.09 and WAC 173-400-060, the appropriate MM&R, and the Reference Method. Also, clarified that the monitoring method supersedes the monitoring method in I.A.2.

- Requirement EU 7.3 – Clarified that the 9/10/98 version of Regulation I, Section 7.09(b) will become federally enforceable upon adoption into the SIP. Also, clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 7.09(b) requirement listed in I.A.10.

- Requirement EU 7.4 – Added II.A.1(c) Facility Inspections to the MM&R and clarified that the monitoring method supersedes the monitoring method listed in I.A.9.

- Requirement EU 7.5 – Added II.A.1(c) Facility Inspections to the MM&R. Also, clarified that Regulation I, Section 9.20(a) only applies to equipment that has received an NOC Order of Approval.

- Requirement EU 8.1 -- Clarified that the 9/10/98 version of Regulation I, Section 7.09(b) will become federally enforceable upon adoption into the SIP. Also, clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 7.09(b) requirement listed in I.A.10.

- Requirement EU 8.2 – Added II.A.1(c) Facility Inspections to the MM&R. Also, clarified that Regulation I, Section 9.20(a) only applies to equipment that has received an NOC Order of Approval and clarified the date of the regulation.

- Requirement EU 8.3 – Added II.A.1(c) Facility Inspections to the MM&R.

- Requirement EU 9.1 – Clarified that the 9/10/98 version of Regulation I, Section 7.09(b) will become federally enforceable upon adoption into the SIP. Also, clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 7.09(b) requirement listed in I.A.10.

- Requirement EU 9.2 – Added II.A.1(c) Facility Inspections to the MM&R. Clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 9.20(b) requirement listed in I.A.9.

- Requirement EU 10.1 to 10.5 – Changed the reference to location of the MM&R.

- Requirement EU 10.6 – Clarified that the 9/10/98 version of Regulation I, Section 7.09(b) will become federally enforceable upon adoption into the SIP. Also, clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 7.09(b) requirement listed in I.A.10.

- Requirement EU 10.7 – Added II.A.1(c) Facility Inspections to the MM&R and clarified that 9:20(a) only applies to equipment that has been approved by an order of approval.

- Requirement EU 10.8 – Added II.A.1(c) Facility Inspections to the MM&R.

- Requirement EU 11.1 – Clarified that the 9/10/98 version of Regulation I, Section 7.09(b) will become federally enforceable upon adoption into the SIP. Also, clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 7.09(b) requirement listed in I.A.10.

- Requirement EU 11.2 – Added II.A.1(c) Facility Inspections to the MM&R. Also, clarified that Regulation I, Section 9.20(a) only applies to equipment that has received an NOC Order of Approval. Added the following note to the MM&R Section: “Note: this method applies only for above-ground tanks”

- Requirement EU 11.3 – Added II.A.1(c) Facility Inspections to the MM&R. Added the following note to the MM&R Section: “Note: this method applies only for above-ground tanks”

- Requirement EU 12.1 – Clarified that the 9/10/98 version of Regulation I, Section 7.09(b) will become federally enforceable upon adoption into the SIP. Also, clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 7.09(b) requirement listed in I.A.10.

- Requirement EU 14.1 – Clarified that the 9/10/98 version of Regulation I, Section 7.09(b) will become federally enforceable upon adoption into the SIP. Also, clarified that the monitoring method supersedes the monitoring method for Regulation I, Section 7.09(b) requirement listed in I.A.10.

- Requirement EU 14.2 – Added II.A.1(c) Facility Inspections to MM&R. Clarified that Regulation I, Section 9.20(a) only applies to equipment that has received an NOC Order of Approval.

- Requirement EU 14.9 – Added II.A.1(c) Facility Inspections to the MM&R.

11. 3. 2. Changes to Air Operating Permit Section II

- In cases where WAC 173-401-615 is cited as a requirement, the applicability date of the requirement has been changed from November 4, 1993 or September 15, 2001 to October 17, 2002.

- II.A – Added "The 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(iii) of this permit. [WAC 173-401-615, 10/17/02]"

- II.A.1(a) – Clarified that for purposes of complying with the quarterly opacity monitoring required by Section II.A.1(a), Boeing is only required correct visible emissions if observed during the quarterly inspection. (However, visible emissions may still be a deviation of the underlaying applicable requirement). Added that in addition to eliminating visible emissions, Boeing could instead demonstrate compliance using the reference method. Added - "All observations using the opacity reference test method shall be reported according to V.Q.4 Method 9A Reports." Removed a statement that had been duplicated twice in this monitoring method.

- II.A.1(b) – Clarified that if Boeing cannot correct possible compliance problems within 24 hours and reports the potential problem according to Section V.Q.5, it would not be a deviation of the monitoring method. However, it may be a deviation of the underlying applicable requirement and not taking action as described would be a permit deviation.

- II.A.1(c) – Clarified that if Boeing cannot correct possible compliance problems within 24 hours and reports the potential problem according to Section V.Q.5, it would not be a deviation of the monitoring method. However, it may be a deviation

of the underlying applicable requirement. Clarified that the monitoring method only applies to applicable requirements for which it is an applicable monitoring method. Added "If Boeing observes potential compliance problems for which there are no monitoring requirements under an applicable requirement and corrects that problem within 24 hours, Boeing does not need to report the deviation under Section V.M. Compliance certifications or V.Q Reporting and does not need to record such action under Section V.O.1.4 of this permit." Removed the statement that "If Boeing does not take the appropriate action as described above, Boeing must report the deviation under Section V.M Compliance certifications or V.Q Reporting of this permit. Boeing shall also promptly repair defective insignificant emissions units." Changed the "NESHAP" to the more general term "requirement", as per NBF/Plant 2 Air Operating Permit.

- II.A.1(d) – Clarified that if Boeing cannot correct possible compliance problems with in 24 hours and reports the potential problem according to Section V.Q.5, it would not be a deviation of the monitoring method. However, it may be a deviation of the underlying applicable requirement. Clarified that the monitoring method only applies to applicable requirements for which it is an applicable monitoring method. Added "and does not need to record such action under Section V.O.1.4 of this permit, except that deviations from the spray gun cleaning requirements under 40 CFR 63.744(c) must be reported in the Aerospace NESHAP semi-annual report in accordance with Section V.Q.3(b)(3)."

- II.A.1(f) – Clarified that if Boeing cannot correct possible compliance problems with in 24 hours and reports the potential problem according to Section V.Q.5, it would not be a deviation of the monitoring method. However, it may be a deviation of the underlying applicable requirement. Clarified that the monitoring method only applies to applicable requirements for which it is an applicable monitoring method.

- II.A.2(d)(ii) – Clarified that if Boeing cannot correct possible compliance problems with in 24 hours and reports the potential problem according to Section V.Q.5, it would not be a deviation of the monitoring method. However, it may be a deviation of the underlying applicable requirement. Removed the word "completed" from the statement discussing what will occur in case Boeing fails to take action as described in the monitoring method.

- II.A.2(d)(iii) – Added that the monitoring for visible emission while burning oil is not required during periods when natural gas is a reasonable option, such periods include testing, training, and calibration. Added that for purposes of complying with the visible emissions monitoring required by Section II.A.2((d)(iii), Boeing only has to take action if Boeing observes visible emissions during required monitoring (However, visible emissions may still be a deviation of the underlaying applicable requirement). Added that in addition to eliminating visible emissions, Boeing could instead demonstrate compliance using the reference method. Added - "All observations using the opacity reference test method shall be reported according to

V.Q.4 Method 9A Reports." Removed the word "corrective" and the words "or observing opacity above the standard, is a deviation of this permit" from the statement discussing what will occur in case Boeing fails to take action as described in the monitoring method.

- II.A.2(d)(v) – Clarified that for purposes of complying with the visible emissions monitoring required by Section II.A.2(d)(v), Boeing only has to take action if visible emissions are observed during a required inspection (However, visible emissions may still be a deviation of the underlaying applicable requirement). Added that in addition to eliminating visible emissions, Boeing could instead demonstrate compliance using the reference method. Added - "All observations using the opacity reference test method shall be reported according to V.Q.4 Method 9A Reports." Clarified that if Boeing cannot correct possible compliance problems with in 24 hours and reports the potential problem according to Section V.Q.5, it would not be a deviation of the monitoring method. However, it may be a deviation of the underlying applicable requirement. Removed the sentence "Observations for visible emissions shall be at 15 second intervals."

- II.A.2(d)(vi)

  1. Clarified that Boeing must take corrective actions if Boeing identifies a potential compliance problem with respect to an applicable requirement for which that method is an applicable monitoring method.

  2. Clarified that if Boeing cannot correct possible compliance problems with in 24 hours and reports the potential problem according to Section V.Q.5, it would not be a deviation of the monitoring method. However, it may be a deviation of the underlying applicable requirement.

  3. Added that in addition to eliminating visible emissions, Boeing could instead demonstrate compliance using the reference method.

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

  5. Removed "Observations for visible emissions shall be at 15 second intervals."

  6. In the sentence beginning "Take corrective action, which may include shutting down the unit or activity", added "until it can be repaired". Deleted the second bullet of the section the same information was repeated in the seventh bullet.

  7. In the paragraph discussing nozzle inspection, clarified that Boeing may correct the problem, shut down the unit or activity until it can be repaired, or report according to Section V.Q.5. Removed the discussion of failure to take corrective action since this action is discussed elsewhere in the II.A.2(d)(vi).

8. In the pressure drop paragraph, modified the list of possible actions to include reporting according to Section V.Q.5. Modified the sentence discussing what will happen if Boeing fails to take action as described in the paragraph.

- II.A.2(d)(viii) – Clarified that if Boeing cannot correct possible compliance problems with in 24 hours and reported the potential problem according to Section V.Q.5, it would not be a deviation of the monitoring method. However, it may be a deviation of the underlying applicable requirement. In the paragraph discussing inspection of nozzles for pluggage, added the words "or corrected" to the actions that Boeing must take within 24 hours.

- II.A.2(d)(xi) – Moved the monitoring method from II.A.2(k) so it is clear that this is part of the O&M Plan.

11. 3. 3. Changes to Air Operating Permit Section V

- In cases where WAC 173-401-615 is cited as a requirement, the applicability date of the requirement has been changed from November 4, 1993 or September 15, 2001 to October 17, 2002.

- V.P – Modified section to state that deviation reports shall include an explanation for any instance in which Boeing fails to meet data recovery requirements, why data was not collected, and discussion of actions taken to insure collection of the data.

- V.P – Modified the provision of excusing certain instances of failure to recover the required amount of monitoring information.

- V.Q.1(c) – Clarified that any application form, report, or compliance certification that is required to be certified by any applicable requirement must be certified by a responsible official in addition to those required by the permit. The section also specifies reports that must be certified upon submittal, as opposed to at least once every six months.

- V.Q.4 – Added a requirement to report the results of all Ecology Method 9A tests within 30 days after the end of the month.

- V.Q.5 – Added a requirement to report problems not corrected within 24 hours.

- V.Q.6 – Updated the list of reports and deleted the column specifying when a report must be signed by the responsible official. Changed the name of the section to "Required Applications, Reports, and Compliance Certifications"

- V.Q.7 – Updated the list of notifications and updated the citation for Puget Sound Clean Air Agency Regulation I Section 3.07(b) from February 10, 1994 to February 9, 1995. Corrected the dates for the regulatory citations for Regulation I Section 3.07 (N.8) and Regulation III, Section 2.02 (N.10).

- V.Z – Updated the insignificant emission units and activities section to reflect changes in WAC 173-401-530(2) as of October 17, 2002 and changed the applicability date from June 17, 1994 to October 17, 2002.

11. 4 June 2003 Public Comments & Agency Responses

The only comments during the June 2003 public comment period were submitted by Boeing. These comments and the corresponding responses are listed below.

11. 4. 1. AOP Comments

1) Cover page: Please change the mail code to 5E-36 and the responsible official to Mary K. Armstrong.

Response: *Change made as requested.*

2) Page 7: In requirement number I.A.3, the "State Only" version of WAC 173-400-050 is not identified and the standard language associated with the SIP version of WAC 173-400-050 (i.e. "*This requirement will be superseded...*") is missing. The requirement paraphrase is also incomplete. Therefore, please change I.A.3 as shown below (which will preserve the AOP's numbering) or, alternatively, list WAC 173-400-050 as a separate applicable requirement similar to EU 4.25.

I.A.3	Puget Sound Clean Air Agency Reg I: 9.09(a) *This requirement will be superseded upon adoption of the 4/9/98 version of Reg I: 9.09 into the SIP* Puget Sound Clean Air Agency Reg I: 9.09 *(State Only) This requirement will become federally enforceable upon adoption of the 4/9/1998 version of Reg I: 9.09 into the SIP* WAC 173-400-050 *This requirement will be superseded upon adoption of the 9/15/01 version of* WAC 173-400-050 *into the SIP*. WAC 173-400-050 *(State Only). This requirement will become federally enforceable upon adoption into the SIP and will replace the 3/22/91 version of* WAC 173-400-050)	02/10/1994 04/09/1998 3/22/1991 09/15/01	Shall not emit particulate matter in excess of 0.05 gr/dscf (0.10 gr/dscf per WAC 173-400-050) corrected to 7% O_2 from fuel burning equipment and combustion sources (applies to the equipment that produces hot air, hot water, steam, or other heated fluids by external combustion of fuel. Examples include indirect-fired drying ovens and space heaters and water heaters)	II.A.1(a) Opacity Monitoring II.A.1(b) Complaint Response II.A.1(c) Facility Inspections	At least 1-hr per run	Puget Sound Clean Air Agency Method 5 (See Section VIII)

Response: *A new row was inserted into the table, and the specific requirements of WAC 173-400-050 were listed out in the new row.*

3) Page 16: The Order of Approval #3842 was modified in 2002. MSS #58040 is now under the new Order of Approval # 8702. Please change the Order of Approval numbers as shown below.

Bldg.	*Col./Dr.*	*MSS/ID#*	*Order of Approval #*	*Install Date*	*Source Description*
17-62	*O/S East*	*58040*	*8702*	*1992*	*Scrubber No. 6*

Response: *Change made as requested.*

4) Page 25: Please revise EU 1.20, Enforceable Requirement heading from NOC #8029 to Order of Approval #8029. Also, please add NOC Order of Approval #8702 Conditions to the permit as shown below (This Order of Approval was received in August 2002).

(j) Requirement Nos. EU 1.21 through EU 1.23 apply to the scrubber at Bldg. 17-62, MSS/ID# 58040.				
EU 1.21	Order of Approval #8702, Condition #3 (8/2/02)	Boeing shall install and maintain gauges to measure the pH and differential pressure of the chemical solution tank scrubber. Within 90 days after the completion of the tankline modification project, the acceptable range for the pressure drop shall be clearly identified on or near the gauge, or on a pressure drop log.	II.A.2(d)(vi) Scrubbers for Metal Finishing Tankline	
EU 1.22	Order of Approval #8702, Condition #4 (8/2/02)	Within 90 days after the completion of the tankline modification project, Boeing shall begin collecting monthly differential pressure and pH readings. If the differential pressure or pH is not within the acceptable range, Boeing shall take corrective actions as specified in the facility's Operation and Maintenance Plan.	II.A.2(d)(vi) Scrubbers for Metal Finishing Tankline	

Response: *EU 1.20 was changed as requested. Conditions No. 3 and No. 4 of Order of Approval No. 8702 were added to the AOP as requested. Condition No. 5 of Order of Approval No. 8702 was found to be obsolete, and was not added to the AOP. A discussion of the reasons for not adding this condition to the AOP was added to Section 5.3.1 of this Statement of Basis.*

5) Page 26: Please delete a comma from the EU name and update the equipment information as shown below.

Aerospace Coating, Cleaning, Chemical Milling Maskant and Depainting Operations

Bldg.	*Col/Dr*	*MSS/ID #*	*Order of Approval #*	*Date Installed*	*Source Description*	*Aerospace NESHAP Coatings with Inorganic HAP Used in Unit?*
17-45	*F2.5*	*56105*	*8669*	*1991*	*Spray coating booth – dry filter*	*Yes*
17-45	*F7*	*3806*	*8747*	*2003*	*Spray coating booth – dry filter*	*Yes*
17-62		*6783*	*8835*	*2003*	*Spray coating booth – dry filter*	*Yes*

Response: *Changes made as requested.*

6) Page 31-32: Please correct a grammatical error as shown below.

EU 2.15	40 CFR 63.10(b)(3) (4/5/02)	If Boeing determines that its Auburn facility emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants, but is not subject to a relevant standard or other requirement established under 40 CFR part 63, Boeing shall keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first…	NMR	

Response*: Change made as requested.*

7) Page 39: Please change the requirement paraphrase of EU 2.50 as shown below to reflect the regulatory language.

EU 2.50	40 CFR 63.745(a) (12/8/00)	Aerospace equipment that is no longer operational, intended for public display, and not easily capable of being moved is exempt from the requirements of 40 CFR 63.745, EU 2. 51 through EU 2. 55.	NMR	

Response*: Change made as requested.*

8) Page 40: Please modify the requirement as paraphrase shown below to reflect the regulatory language:

EU 2.55	40 CFR 63.745(f)(3) (12/8/00)	Certain situations are exempt from the requirements of 40 CFR 63.745(f)(1), including the use of airbrush equipment, hand-held aerosol cans, touch-up and repair operations, and the use of an extension on the spray gun to properly reach limited access spaces.	NMR	

Response: *Change made as requested.*

9) Page 43: Please change the requirement paraphrase of EU 2.67 as shown below to reflect the regulatory language.

EU 2.67	40 CFR 63.745(g)(2) (i)(C) (12/8/00)	For existing booths or hangars where primers or topcoats containing inorganic HAPs are spray applied, the air stream must be exhausted through an air pollution control system that meets or exceeds the efficiency data points in Tables 1 and 2 and is approved by the permitting authority. Alternatively, may choose to comply with 40 CFR 63.745(g)(2)(i)(A), EU 2. 65, or 40 CFR 63.745(g)(2)(i) (B), EU 2.66.	II.A.2(c) Documentation on File	

Response: *Change made to the paraphrase for 40 CFR 63.745(g)(2)(i)(C) as requested.*

10) Page 51: Please correct the requirement paraphrase of EU 2.96 as shown below to reflect the permit language.

EU 2.96	PSD No. 88-5 Amendment 2 Approval Condition 4	At least 50 percent of the paint used at Building 17-45 shall be applied in a spray booth by use of high transfer efficiency (HTE) painting equipment and methods, such as: high volume low pressure (HVLP) spray guns or electrostatic paint application.	II.A.1(d) Work Practice Inspection	

Response: *Change made as requested.*

11) Page 57: Please correct the NOC and the equipment information as shown below. NOC Order of Approval #8506 was modified in 2002 and MSS# 56105 is now under Order of Approval # 8669.

a) Order of Approval 8506				
Requirement Nos. EU 2. 120 –through EU 2. 125 are the Order of Approval 8506 conditions that apply to the MSS 59822 and 10695 spray booths in the Bldg. 17-45.				
EU 2.120	Order of Approval #8506 Condition #3 (3/29/02)	Boeing shall install and maintain gauges to measure the pressure drop across the filters of the manual spray booth 10695 and spray booth 59822 in Building 17-45.	II.A.2(d)(ii) Spray Booths	
EU 2.121	Order of Approval #8506 Condition #4 (3/29/02)	Within 90 days after beginning operations, Boeing shall incorporate the normal operating pressure drop into its Operation and Maintenance (O&M) Plan or pressure drop log sheet and clearly marked that range on or near the pressure drop gauge.	II.A.2(d)(ii) Spray Booths	
EU 2.122	Order of Approval #8506 Condition #5 (3/29/02)	For manual spray booth 10695 and spray booth 59822, check the primary dry filter systems, where visible, for proper seating and complete coverage over the exhaust plenum. This inspection shall be conducted at least monthly or at time of use if booth is used less frequently than once per month. If filter coverage is acceptable for 12 consecutive months, the inspection frequency may be reduced to quarterly. If coverage is unacceptable during quarterly inspections, monthly inspections shall be reinstated.	II.A.2(d)(ii) Spray Booths	
EU 2.123	Order of Approval #8506 Condition #6 (3/29/02)	If improperly seated filters, incomplete coverage over the exhaust plenum, or abnormal pressure drop are observed, Boeing shall take corrective action prior to resuming any spray coating activity.	II.A.2(d)(ii) Spray Booths	
EU 2.124	Order of Approval #8506 Condition #7 (3/29/02)	Records of all inspections and corrective actions shall be maintained for at least five years and made available to Puget Sound Clean Air Agency personnel upon request.	II.A.2(c) Documentation on File	

a) Order of Approval 8506 Requirement Nos. EU 2. 120 –through EU 2. 125 are the Order of Approval 8506 conditions that apply to the MSS 59822 and 10695 spray booths in the Bldg. 17-45.				
EU 2.125	Order of Approval #8506 Condition #8 (3/29/02)	Boeing shall comply with the Aerospace National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63 Subpart GG and the General Provisions of the NESHAP, 40 CFR 63 Subpart A with respect to operations in the spray coating booths.	II.A.2(f) Aerospace NESHAP Solvent Cleaner , II.A.2(g) Aerospace NESHAP Coating , II.A.2(h) Aerospace NESHAP Pressure Drop/ Water Flow Rate	

Response*: Change made as requested.*

12) Page 59 to 60: Change EU 2.128, EU 2.129, and EU 2.130 as shown below. This is consistent with how the "State Only" requirements that are pending SIP approval have been handled elsewhere in this Draft permit and the NBF/Plant 2 Draft permit.

EU 2.128	Puget Sound Clean Air Agency Reg I: 9.16(b) (7/12/01) (State Only) *This requirement will become federally enforceable upon adoption into the SIP and will replace the 6/13/91 version of Reg I: 9.16.*	The following activities are exempt from the provisions of Reg I: 9.16(c) and (d): 1) Application of architectural or maintenance coatings to stationary structures. 2) Aerospace coating operations subject to 40 CFR Part 63 Subpart GG, including all activities and materials listed in 40 CFR 63.741(f). 3) Use of HVLP guns in certain situations described in Reg I: 9.16(b)(3)(A) through (E). 4) Use of air brush spray equipment with 0.5 to 2.0 CFM airflow and 2 fluid ounces or less cup capacity. 5) Use of hand-held aerosol spray cans with 1 quart or less capacity. 6) Indoor application of automotive undercoating materials using organic solvents with flash points in excess of 100^{o}F.	NMR	

EU 2.129	Puget Sound Clean Air Agency Reg I: 9.16(c) (7/12/01) (State Only) *This requirement will become federally enforceable upon adoption into the SIP and will replace the 6/13/91 version of Reg I: 9.16.*	General Requirements for Indoor Spray-Coating Operations. It shall be unlawful for any person subject to the provisions of Reg I, Section 9.16 to cause or allow spray-coating inside a structure, or spray-coating of any motor vehicles or motor vehicle components, unless the spray-coating is conducted inside an enclosed spray area. The enclosed spray area shall employ either properly seated paint arresters, or water-wash curtains with a continuous water curtain to control the overspray. All emissions from the spray-coating operation shall be vented to the atmosphere through an unobstructed vertical exhaust vent.	II.A.1(c) Facility Inspections	
EU 2.130	Puget Sound Clean Air Agency Reg I: 9.16(d) (7/12/01) (State Only) *This requirement will become federally enforceable upon adoption into the SIP and will replace the 6/13/91 version of Reg I: 9.16.*	General Requirements for Outdoor Spray-Coating Operations. It shall be unlawful for any person subject to the provisions of this section to cause or allow spray-coating outside an enclosed structure unless reasonable precautions are employed to minimize the overspray. Reasonable precautions include, but are not limited to the use of: (1) Enclosures and curtailment during high winds; and (2) High-volume low-pressure (HVLP), low-volume low-pressure (LVLP), electrostatic, or air-assisted airless spray equipment. Airless spray equipment may be used where low viscosity and high solid coatings preclude the use of higher-transfer efficiency spray equipment.	II.A.1(c) Facility Inspections, II.A.1(d) Work Practice Inspection	

Response: *Change made as requested.*

13) Page 60: Please add the new NOC Order of Approvals #8747 (December 19, 2002) and #8835 (July 1, 2003) to the permit as shown below.

(x) Order of Approval 8747 Requirement Nos. EU 2. 131 through EU 2. 139 are the Order of Approval 8747 conditions that apply to the MSS 3806 spray booth in the Bldg. 17-45.				
EU 2.131	Order of Approval #8747 Condition #3 (12/19/2002)	Boeing shall install exhaust filters that meet the requirements of 40 CFR 63.745(g)(2)(ii).	II.A.2(h) Aerospace NESHAP Pressure Drop/ Water Flow Rate	
EU 2.132	Order of Approval #8747 Condition #4 (12/19/2002)	Boeing shall comply with all applicable requirements of 40 CFR 63 Subpart GG.	II.A.2(f) Aerospace NESHAP Solvent Cleaner , II.A.2(g) Aerospace NESHAP Coating , II.A.2(h) Aerospace NESHAP Pressure Drop/ Water Flow Rate	
EU 2.133	Order of Approval #8747 Condition #5 (12/19/2002)	The air exhausted from this spray booth shall be vented through HEPA filters with a control efficiency of 99.97% or greater.	II.A.2(c) Documentation on File	
EU 2.134	Order of Approval #8747 Condition #6 (12/19/2002)	Boeing shall install and maintain a gauge to measure the pressure drop across the exhaust filters of the spray booth. Within 90 days after issuance of this Order of Approval, the acceptable range for the gauge shall be clearly marked on or nearby the gauge or on a pressure drop log.	II.A.2(d)(ii) Spray Booths	
EU 2.135	Order of Approval #8747 Condition #7 (12/19/2002)	Boeing shall read and record the pressure drop once each shift of operation on a log. If the pressure drop is not within the acceptable range, Boeing shall, as soon as practicable but within 24 hours of initial observation either; correct the pressure drop or, alternatively, shut unit or activity until it can be repaired	II.A.2(h) Aerospace NESHAP Pressure Drop/ Water Flow Rate	

EU 2.136	Order of Approval #8747 Condition #8 (12/19/2002)	Boeing shall check the primary filter systems, where visible, for proper seating and complete coverage over the exhaust plenum, and shall record the results of this inspection. This inspection shall be conducted monthly or at a time of use if booth is used less frequently than once per month. If filter coverage is acceptable for all inspections in a one year period, this inspection may be reduced to once per calendar quarter. If coverage is unacceptable during quarterly inspections, monthly inspections shall be reinstated. If coverage is found to be unacceptable, Boeing shall, as soon as practicable but within 24 hours of the initial observation either; correct filter coverage or, alternatively, shut down the booth or activity until it can be repaired.	II.A.2(d)(ii) Spray Booths	
EU 2.137	Order of Approval #8747 Condition #9 (12/19/2002)	Boeing shall annual check that the exhaust filters installed at this booth meet the requirements of 40 CFR 63.745(g)(2)(ii).	II.A.2(h) Aerospace NESHAP Pressure Drop/ Water Flow Rate	
EU 2.138	Order of Approval #8747 Condition #10 (12/19/2002)	Boeing shall check to see that the pressure drop gauge functions properly and the pressure drop range is labeled on the log sheets at least quarterly.	II.A.1(c) Facility Inspections	
EU 2.139	Order of Approval #8747 Condition #11 (12/19/2002)	Boeing shall comply with the requirements of Puget Sound Clean Air Agency Regulation II Section 3.09.	II.A.2(b) VOC Content Monitoring and Recordkeeping Procedure II.A.1(d) Work Practice Inspection	

(a) (y)Order of Approval 8835 Requirement Nos. EU 2. 140 through EU 2. 147 are the Order of Approval 8835 conditions that apply to the MSS 6783 spray booth in the Bldg. 17-62.				
EU 2.140	Order of Approval #8835 Condition #3 (7/1/2003)	Boeing shall install exhaust filters that meet the requirements of 40 CFR 63.745(g)(2)(ii).	II.A.2(h) Aerospace NESHAP Pressure Drop/ Water Flow Rate	
EU 2.141	Order of Approval #8835 Condition #4 (7/1/2003)	Boeing shall comply with all applicable requirements of 40 CFR 63 Subpart GG.	II.A.2(f) Aerospace NESHAP Solvent Cleaner , II.A.2(g) Aerospace NESHAP Coating , II.A.2(h) Aerospace NESHAP Pressure Drop/ Water Flow Rate	
EU 2.142	Order of Approval #8835 Condition #5 (7/1/2003)	Boeing shall install and maintain a gauge to measure the pressure drop across the exhaust filters of the spray booth. The acceptable range for the gauge shall be clearly marked on or nearby the gauge or on a pressure drop log.	II.A.2(d)(ii) Spray Booths	
EU 2.143	Order of Approval #8835 Condition #6 (7/1/2003)	Boeing shall read and record the pressure drop once each shift of operation on a log. If the pressure drop is not within the acceptable range, Boeing shall, as soon as practicable but within 24 hours of initial observation either; correct the pressure drop or, alternatively, shut unit or activity until it can be repaired	II.A.2(h) Aerospace NESHAP Pressure Drop/ Water Flow Rate	

EU 2.144	Order of Approval #8835 Condition #7 (7/1/2003)	Boeing shall check the primary filter systems, where visible, for proper seating and complete coverage over the exhaust plenum, and shall record the results of this inspection. This inspection shall be conducted monthly or at a time of use if booth is used less frequently than once per month. If filter coverage is acceptable for all inspections in a one year period, this inspection may be reduced to once per calendar quarter. If coverage is unacceptable during quarterly inspections, monthly inspections shall be reinstated. If coverage is found to be unacceptable, Boeing shall, as soon as practicable but within 24 hours of the initial observation either; correct filter coverage or, alternatively, shut down the booth or activity until it can be repaired.	II.A.2(d)(ii) Spray Booths	
EU 2.145	Order of Approval #8835 Condition #8 (7/1/2003)	Boeing shall annual check that the exhaust filters installed at this booth meet the requirements of 40 CFR 63.745(g)(2)(ii).	II.A.2(h) Aerospace NESHAP Pressure Drop/ Water Flow Rate	
EU 2.146	Order of Approval #8835 Condition #9 (7/1/2003)	Boeing shall check to see that the pressure drop gauge functions properly and the pressure drop range is labeled on the log sheets at least quarterly.	II.A.1(c) Facility Inspections	
EU 2.147	Order of Approval #8835 Condition #10 (7/1/2003)	Boeing shall comply with the requirements of Puget Sound Clean Air Agency Regulation II Section 3.09.	II.A.2(b) VOC Content Monitoring and Recordkeeping Procedure II.A.1(d) Work Practice Inspection	

Response: *Orders of Approval No. 8747 and No. 8835 were added to the AOP. The monitoring methods were modified slightly from those listed above as needed.*

14) Page 62: Please change item #12 as shown below and add attachments #13 and 14 to the list.

12. US EPA Any waterborne coating for which the manufacturer's supplied data demonstrate that organic HAP and VOC contents are less than or equal to the organic HAP and VOC content limits for its coating type, as specified in 40 63.745(c) and 63.747(c), is exempt from the following requirements of this subpart: 40 CFR 63.745(d)-(e), 63.747(d)-(e), 63.749(d) and (h), 63.750(c)-(h) and (k)-(n), 63.752(c) and (f), and 63.753(c) and (e). [40 CFR 63.741(i)]

13. Puget Sound Clean Air Agency	Small containers with a capacity of two gallons or less containing acetone are exempt from Puget Sound Clean Air Agency Regulation III Section 3.05 and WAC 173- 460-060(5). Letter dated August 10, 1999, D. S. Kircher to The Boeing Company, Small Container Used for Immersion Cleaning with Acetone. See Attachment
14. Puget Sound Clean Air Agency	Hand-wipe cleaning operations (Aerospace NESHAP 40 CFR Part 63 Subpart GG) where wiping, scrubbing, mopping or other hand actions are used are specifically not included as "flush cleaning." Letter dated August 1, 1996, A. C. Lee to C. Morris, Airplane Cleaning Operations Boeing Everett Facility. See Attachment 15.

Response: *Changes made as requested.*

15) Page 73: Please correct a typo as shown below:

> ***(b) 40 CFR 60 subpart Dc***
>
> Requirement Nos. EU 4.20 through EU4.22 are the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR 63 Subpart Dc).

Response*: Change made as requested.*

16) Page 77 and 85: EU 4.25 and EU 5.3, please correct the date as shown below:

EU 4.25	WAC 173-400-050 (3/22/91) *This requirement will be superseded upon adoption of the 9/15/01 version of WAC 173-400-050 into the SIP.* WAC 173-400-050 (9/15/01*)(State Only). This requirement will become federally enforceable upon adoption into the SIP and will replace the 3/22/91 version of WAC 173-400-050)*	Shall not emit particulate matter in excess of 0.10 gr/dscf corrected to 7% O2 from fuel burning equipment and combustion sources. (Applies to the equipment that produces hot air, hot water, steam, or other heated fluids by external combustion of fuel, such as boilers and water heaters.)	II.A.2(d)(iii) Fuel Burning Equipment II.A.1(b) Complaint Response; II.A.1(c) Facility Inspections	EPA Method 5 (See 40 CFR Part 60, Appendix A, July 1, 2001)

Response: *Change made as requested.*

17) Page 79: Please correct a typo as shown below.

(d) Requirements Nos. EU 4.30 through EU 4.33 are the Order of Approval conditions that apply to the MSS 6827 boiler in Building 17-09.

Response: *Change made as requested.*

18) Page 91 and 92: We receive less than 1 megagram of VOHAP per year. It is not our alternative operating scenario. Please change the heading for Section I.B.6(b) and (c) as shown below.

(c) (b) NESHAP Subpart DD (waste > 1 megagram)
Requirements No. EU 6.13 through EU 6.16 are the Off-Site Waste and Recovery Operations NESHAP requirements. These rules below apply only if the facility received regulated wastes greater than 1 megagram.
(d) (c) NESHAP Subpart DD (waste < 1 megagram)
Requirement No. EU 6.17 is the Off-Site Waste and Recovery Operations NESHAP requirements. When the total annual quantity of the HAP contained in the off-site material received at the plant site is less than 1 megagram (2200 pounds) per year, the plant site is exempt from the requirements of 40 CFR 63.682 through 40 CFR 63.699.

Response: *Change made as requested.*

19) Page 97: Please add the following equipment to the list and change the requirement heading as shown below. This equipment is currently listed under Section I.B.8. (see also comment 23, below)

Bldg.	*Col./Dr.*	*MSS/ ID#*	*Order of Approval #*	*Install Date*	*Source Description*	*Rated at 2000 cfm or less*
17-66	*O/S; Door 9*	*61877*	*7591*	*1998*	*Dust Collector; QA Lab*	*Y*

(a) Requirement Nos. EU 7.1 through EU 7.5 are the Puget Sound Clean Air Agency requirements for operating permit sources.

Response: *Changes made as requested.*

20) Page 98: Please correct the equipment list as shown below.

-17-05	*Door S21*	*58144*	*8302*	*2001 (NOC date)*	*Baghouse*	

Response: *Change made as requested.*

21) Page 104: Please correct the building information as shown below.

(k) Requirement Nos. EU 7.27 through EU 7.29 are the Order of Approval 8082 conditions that apply to the Bldg. 17-07, MSS/ID# 16186.

***Response**: Change made as requested.*

22) Page 104: Please correct the building information as shown below.

(l) Requirement No. EU 7.30 is the Order of Approval 8302 permit condition that applies to the Bldg. 17-05, MSS/ID# 58144.

***Response:** Change made as requested.*

23) Page 104: Please move Order of Approval #7591 from Section I.B.8 to Section I.B.7.

***Response:** Change made as requested.*

24) Page 106: Please move the following equipment to Section I.B.7 Cyclones, Baghouses, and Other Particulate Control Operations.

Bldg.	*Col./Dr.*	*MSS/ ID#*	*Order of Approval #*	*Instal l Date*	*Source Description*	*Rated at 2000 cfm or less*
17-66	*O/S; Door 9*	*61877*	*7591*	*1998*	*Dust Collector, QA Lab*	*Y*

***Response:** Change made as requested.*

25) Page 107: Please move EU 8.10 and EU 8.11 to Section I.B.7 Cyclones, Baghouses, and Other Particulate Control Operations.

***Response:** EU-10 & EU-11 were the NOC 7591 requirements for the MMS 61877 dust collector. These requirements have been moved to EU 7.*

26) Page 111: Please correct a typo as shown below. For EU 10.1, please separate II.A.2(d)(xi) from II.A.2(c) under the MMR column.

Bldg.	*Col./Dr.*	*MSS/ID #*	*Order of Approval #*	*Install Date*	*Source Description*
17-64	*SE*	*9754*	*10338*	*1989*	*Gasoline station*

Response: *Change made as requested.*

27) Page 117: Please add the following at the end of Section I.B.12.

EXEMPTIONS, EXTENSIONS AND DETERMINATIONS GRANTED BY AGENCIES:

	Source	Description
1.	Puget Sound Clean Air Agency	Letter, February 26, 1993, A. Lee to J. Johnston, Confirmation of exemption from PSAPCA O&M Plan Requirements for Fume Hoods and Ovens. See Attachment 16.

Response: *The attachment was added as requested. However, the paraphrased description of the attachment was modified slightly to include more of the content of the letter. The letter specifically states: "Puget Sound Clean Air Agency will not require record keeping regarding the operations and maintenance of fume hoods or ovens, unless a special condition or other regulatory requirement is imposed upon the specific fume hood or oven operation by this Agency."*

28) Page 118: Please change the header to "I.B.13 Wood Furniture".

Response: *Change made as requested.*

29) Page 119: Please update the equipment information as shown below. These changes are to reflect the newly issued equipment numbers and locations.

17-68	*O/S; Door E30*	*17376*	*8543*	*2002*	*NO2 Scrubber*
17-68	*O/S; Door E30*	*17377*	*8543*	*2002*	*H2S Scrubber*

Response*: Per 10/9/03 discussion with Jade Hudson, Boeing Auburn, the correct location names should be Door W29, not Door E30. Change made as requested.*

30) Page 129: Please correct a typo under II.A.1(a) as shown below.

- 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,

Response*: Change made as requested.*

31) Page 130: Please rearrange the sentence in II.A.1(a) as shown below. This will make it clear that Method 9A is not required once per calendar year if a generator is shut down within 3 hours.

If Boeing observes visible emissions from an emergency generator or generator for fire suppression pumps, Boeing shall check to make sure that the generator is operated and maintained properly and either observe visible emissions using WDOE Method 9A within 30 days at least once every 100 hours of operation but no less than once per calendar year or shut it down within 3 hours.

Response: *This section was modified by adding bullets to further clarify the intent of the monitoring. A modification was also made to more clearly describe what steps Boeing needs to take to maintain its equipment. Review of this monitoring method also indicates a potential problem if a smoking generator were run in excess of three hours close to the end of a calendar year (December 20 for example). The monitoring method could be interpreted as meaning that Boeing would need to rush and complete a Method 9A test within the calendar year. It is not the Agency's intent to make this requirement difficult to meet. Therefore, the language of this section has been modified to clarify that Boeing has at least 30 days to conduct the Method 9A monitoring.*

32) Page 131: Please revise the wording as shown below:

(c) Facility Inspections

> …If Boeing observes potential compliance problems for which there are no monitoring requirements under an applicable regulation and corrects that problem within 24 hours, Boeing does not need to report the deviation under V.M Compliance certifications or V.Q Reporting and does not need to record such action under Section V.O.1.4 of this permit…

Response: *Not all the requirements for which Boeing will be inspecting will have a direct citation to a regulation. One example of this is a piece of equipment that has a requirement stemming from an Order of Approval. Boeing will still need to observe for potential compliance problems with this requirement. The requested change was not made.*

33) Page 131-132: Please revise the wording as shown below. This change is consistent with Everett's permit.

> ***(e) (d) Work Practice Inspection***
>
> … If Boeing observes potential compliance problems for which there are no monitoring requirements under an applicable regulation, and corrects that problem within 24 hours, Boeing does not need to report the deviation under Section V.M Compliance certifications or V.Q Reporting and does not need to record such action under Section V.O.1.4 of this permit, except that deviations from the spray gun cleaning requirements under 40 CFR 63.744(c) must be reported in the Aerospace NESHAP semi-annual report in accordance with Section V.Q.3(b)(3)…

Response: *The Agency agrees that the term "NESHAP" is not appropriate in this instance. However, not all the requirements for which Boeing will be inspecting will have a direct citation to a regulation. One example of this is a piece of equipment that has a requirement stemming from an Order of Approval. Boeing will still need to observe for potential compliance problems with this requirement. The term "NESHAP" was replaced with "requirement" in the AOP.*

34) Page 133: Please add a footnote to Section II.A.2 as shown below to clarify the meaning of the terms "monthly" and "weekly" as they are used throughout II.A.2.

> ***Specific Monitoring***
>
> In this section, if any equipment is not in use during the specified monitoring period, then no monitoring is required for that time period and the absence of monitoring is not a permit deviation.[2]
>
> [2]See Attachment 17 for clarification of weekly and monthly frequencies.

Response: *Change made as requested.*

35) Page 134: Please add a footnote to II.A.2(d)(ii) and add "For dry booths" to the beginning of the sentence. This footnote is in NBF/Plant 2 and Everett's Draft permits.

(ii) Spray Booths

For dry booths, Boeing shall check the primary dry filter systems, where visible, for proper seating and complete coverage over the exhaust plenum.[3]

[3]*On booths with no other applicable requirements, the primary filter is the visible filter. On booths with applicable requirements the primary filter is the filter that meets the efficiencies specified in the requirement. If a multi-stage filtration system is used to meet the required efficiencies, the primary filter is the visible filter that is part of the multistage system used to meet the required efficiency.*

Response: *Change made as requested.*

36) Page 135: Please modify the paragraph as shown below. This language is consistent with Everett's Draft permit.

(iii) Fuel Burning Equipment

- When natural gas is not available or is not being used due to economic reasons, for Boilers #1, #2, and #3 in the building 17-09, Boeing shall check for visible emissions (exclusive of uncombined water vapor) within 24 hours each time that it burns fuel oil and at least once per week if it burns fuel oil for more than seven consecutive days.

Response: *Change made as requested.*

37) Page 136: Please delete the requirement that the record has to be kept in the building 17-09. We request that we have the flexibility as to where the record is stored.

(iii) Fuel Burning Equipment

- Boeing shall maintain a record of when fuel oil is burned in Boilers #1, #2, and #3 and whether the oil burning is due to curtailment or testing.

Response: *The intent of the above description was to clarify the location of the boilers. The Agency recognizes that this statement may have led to confusion, and has removed the statement.*

38) Page 137, 139, and 142. Please change the following paragraph as it appears in II.A.2(d)(v), II.A.2(d)(vi), and II.A.2(d)(viii) as shown below. This change clarifies when corrective action must be taken or when an opacity test must be performed. The suggested language is consistent with the language in Section II.A.1(a) and II.A.2(d)(iii) of this Draft permit as well as in the Draft NBF/Plant 2 AOP at II.A.1(a).

- *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. 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;*

Response: *Change made as requested.*

39) Page 140: Please change the pH range from 7-10 to 5-10 for the reason stating below.

The overall pH effects on scrubber control efficiencies are complicated. To determine mass transfer efficiencies requires knowledge of reaction rate kinetics (first order, second order, reversible)*, how many significant solutes are being absorbed (competing or parallel reactions) and whether the reaction rate is fast or slow. These factors help define the prediction method used and thus determine if the mass transfer is gas phase or liquid phase controlled. When the reaction is slow, the physical absorption mechanism prevails.**** We suspect that this is the case with our scrubbers and therefore, the monitoring parameters listed in the current proposed Auburn AOP adequately characterize the physical absorption mechanisms aspect of our scrubbers. These monitoring parameters include inspections for: a) proper operation of the pump, b) visible emissions, c) nozzle for pluggage, d) even flow patterns and e)

pressure drop if required by NOC. For these reasons, we believe that extending the pH range from 7-10 to 5-10 would not compromise the scrubber emission control performance.

Notes:
* Perry's 5th edition, page 14-6 - 14-7
** Perry's 5th edition, 18-38

Response: *As requested, the Puget Sound Clean Air Agency has reviewed the pH requirements for scrubbers at Boeing Auburn. Our review indicates that different pH ranges are appropriate for different scrubbers, depending on what substances are being scrubbed. Because of the diversity of scrubbers at Boeing Auburn, it is not appropriate to set a single range for all scrubbers. Instead, the Agency encourages Boeing to review the operations of the individual scrubbers, and formulate pH ranges appropriate to each scrubber. In its analysis, we suggest that Boeing use all available sources of information, including but not limited to manufacturer's recommendations and historical permit limits. These pH ranges should become part of the Operations and Maintenance (O&M) plans for the scrubbers. O&M plans are not part of the Boeing Auburn AOP. As such, the Agency has removed the pH range from the AOP and has instead stated that pH is to be maintained within the ranges discussed in the O&M plans for the scrubbers.*

40) Page 142: Please add the appropriate heading to the monitoring method II.A.2(d)(iii) as shown below. This change will clarify that the monitoring method only applies to MSS #55215 and MSS # 58323 and not MSS #55214.

(i) (iii) Wet Particulate Scrubbers

For MSS #55215, 58323:

- At least 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 or 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.

Response: *Inspecting the nozzles for pluggage and even flow patterns is an important monitoring parameter for scrubbers that have nozzles. However, per 10/9/03 discussion with Jade Hudson of Boeing, scrubber MSS#55214 does not have nozzles. Therefore, this part of the monitoring method applies only to MSS #55215 and MSS 58323. Change made as requested.*

41) Page 143: Please revise the paragraph under Section II.A.2(d)(iii) as shown below. This is consistent with recent changes made elsewhere during the development of this permit.

For MSS #55214:

- 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 once per month. If the pressure drop is not within the acceptable range, Boeing shall, as soon as practicable but within 24 hours of the initial observation either; 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 action as described above is a deviation of this permit and must be reported under Section V.M Compliance certifications or V.Q Reporting of this permit.

Response: *Changes made as requested.*

42) Page 145: Please correct the typos under II.A.2(e)(ii) as shown below.

(ii) (ii) For 17-07 building, Order of Approval # 7279

The sum of the actual volatile organic compound (VOC) emissions from paint usage in the two booths combined shall not exceed 30 tons during any 12 consecutive months after the date of this Order. Boeing shall notify PSCAA, in writing, within 30 days after the end of each 12-month period if, during that period, emissions of VOC exceed 27 tons. Boeing shall calculate VOC emissions monthly and retain a record of the calculations for a period of five years. The calculations shall be made available to PSCAA upon request. [Order of Approval #7279 Condition #7, 2/24/98]

Response: *Changed PSAPCA to Puget Sound Clean Air Agency.*

43) Page 146: Please delete the sentence under Section II.A.2(g) as shown below. This regulatory citation appears to be redundant.

Response: *Change made as requested.*

44) Page 146: Please correct the wordings under Section II.A.2(h) as shown below. This change reflects the requirements that follow the sentence.

(h) Aerospace NESHAP Pressure Drop/ Water Flow Rate

(i) For affected spray coating operations when inorganic HAPs are sprayed, unless the primers or topcoats have inorganic HAP concentration less than 0.1 % for carcinogens and 1.0 % for non-carcinogens, Boeing shall install a pressure gauge or water flow meter to continuously monitor:

Response*: Change made as requested.*

45) Page 148: Please delete the following repeated paragraph in II.A.2(h).

- If the manufacturer's recommendations are not utilized, all equipment malfunctions shall be immediately reported to supervisory personnel, or the malfunctioning dry filter booth shall be shut down. [40 CFR 63.745(g), 12/8/00; 40 CFR 63.743(b), 3/27/98]

Response: *Change made as requested.*

46) Page 159: Please change the year under Section V.M. as shown below.

M. Compliance certifications

Boeing shall submit a certification of compliance with permit terms and conditions once per year. The first such certification shall cover the period from permit issuance to December 31,2003.

Response: *Change made as requested.*

47) Page 162: Please modify Section V.P. as shown below. This change is consistent with the Draft Everett and NBF/Plant 2 permits.

P. Data recovery

1. General Data Recovery

If the specific monitoring and recordkeeping requirements in Section II of this permit are silent on data recovery provisions data recovery is assumed to be 100%. However, no data need be collected during any period that the monitored process does not operate.

2. Data Recovery Exceptions

This section applies to the following monitoring and recordkeeping requirements in Section II of this permit.

Response: *Changes made as requested.*

48) Page 169: Please change V.Q.6 as shown below. The Paraphrased Frequency for startup, shutdown, malfunction reports (40 CFR 63.10(d)(5)(i)) in the table should be changed as shown below to be consistent with the underlying rules as well as Section V.Q.3(e) of the permit.

Name of Application, Report, or Compliance Certification	**Required by**	**Paraphrased Frequency**
Aerospace NESHAP semiannual report (V.Q.3(b) Semiannual Compliance Certification Reports)	40 CFR 63.753(b)(1) 40 CFR 63.753(c)(1) 40 CFR 63.9(i)	Semiannually, by August 30th for the reporting period of January through June and by February 28th for the reporting period of July through December. All deviations must also be reported consistent with V.Q.1(b) Deviation Reports.
Aerospace NESHAP annual report (V.Q.3(c) Annual Compliance Certification Reports)	40 CFR 63.753(c)(2) 40 CFR 63.9(i)	Annually, by February 28 for the reporting period of January through December of the previous year.
Periodic startup, shutdown, malfunction report (applicable to Aerospace NESHAP only) (V.Q.3(e) Startup, Shutdown, and Malfunction Reports)	40 CFR 63.10(d)(5)(i)	*Semiannually, by August 30th for the reporting period of January through June and by February 28th for the reporting period of July through December.*
Immediate SSM report (applicable to Aerospace NESHAP only) (V.Q.3(e) Startup, Shutdown, and Malfunction Reports)	40 CFR 63.10(d)(5)(ii)	Consistent with V.Q.1(b) Deviation Reports.
Compliance certification V.M Compliance certifications	WAC 173-401-630(5)	Annually – February 28 for the previous calendar year. Note: This report must be submitted to both EPA and PSCAA
Semiannual deviation report (V.Q.1(a) Semiannual Operating Permit Reports)	WAC 173-401-615(3)(a)	August 30 for period January 1-June 30 and February 28 for period July 1-December 31.

Name of Application, Report, or Compliance Certification	Required by	Paraphrased Frequency
Permit deviations which represent a potential threat to human health or safety (V.Q.1(b) Deviation Reports)	WAC 173-401-615(3)(b)	Within 12 hours of discovery of the deviation.
Other permit deviations including failure to repair any defective equipment (V.Q.1(b) Deviation Reports)	WAC 173-401-615(3)(b)	Monthly - within 30 days after the end of the month in which the deviation is discovered. Note: If Boeing is claiming the emergency defense of WAC 173-401-645 the report must be submitted within two working days.
Emission inventory statement (V.Q.2 Annual Emission Inventory)	Reg. I, 7.09(a)	Annually, by April 15th for the previous reporting period, or by a different date if specified by the Puget Sound Clean Air Agency.
Unavoidable Excess Emissions (V.S Unavoidable excess emissions)	WAC 173-400-107	As needed.
Administrative permit amendment request (VI.B Administrative Permit Amendments)	WAC 173-401-720	Can make change immediately on submission.
Notice of changes not requiring a permit revision, including 502(b)(10) changes, SIP authorized emission trading, and trading under an established emission cap. (VI.C Changes not Requiring Permit Revisions)	WAC 173-401-722	7 days prior to making a change.
Minor permit modification application (VI.E Permit Modification)	WAC 173-401-725	Can make change immediately after filing application.
Significant permit modification application (VI.E Permit Modification)	WAC 173-401-725	As needed.
Notice of Construction and Application for Approval (IV.A New Source Review IV.B Replacement or Substantial Alteration of Emission Control Technology)	Puget Sound Clean Air Agency Reg. I, Article 6	Before construction begins.

Name of Application, Report, or Compliance Certification	Required by	Paraphrased Frequency
Asbestos project quarterly reports	Puget Sound Clean Air Agency Reg. III, Section 4.03(a)(8)(C)	Submitted quarterly
PSD permit applications (IV.A New Source Review IV.B Replacement or Substantial Alteration of Emission Control Technology)	WAC 173-400-141	Before construction begins.
NESHAP Application for Approval of Construction or Reconstruction	40 CFR 63.5(d)(1)	As soon as possible prior to construction if NESHAP in effect. No later than 60 days after effective date of standard if not in effect.

Response: *Changes made as requested.*

49) Page 172: Please add the following item to V.Q.7 as shown below. This is consistent with the Draft Everett permit.

N. 12	WAC 173-401-645(d)	11/4/93	Notice of Emergency (V.R Emergencies)	Within 2 days of exceeding emission limits.

Response*: Changes made as requested.*

50) Page 175 to 185: Please correct the permit section title under the header.

Response: *Change made as requested.*

51) Page 177: Please modify Section V.Z Insignificant emission units and activities as shown below to reference applicable permit terms and conditions to assure internal consistency.

1. Insignificant emission units and activities at Boeing are subject to all applicable requirements set forth in Sections I.A, III and IV. This permit does not require testing, monitoring, reporting or recordkeeping for insignificant emission units or activities, except as required by Section II.A.1(c) & (e) of this permit. Compliance with Section II.A.1(c) & (e) of this permit shall be deemed to

satisfy the requirements of WAC 173-401-615 and 173-401-630(1). [WAC 173-401-530(2)(c), 10/17/02]

***Response**: Puget Sound Clean Air Agency Regulation I Section 7.09(b) and 9.20 are both listed as facility-wide applicable requirements in Section I.A of the AOP (See I.A.10 and I.A.11). The monitoring method listed for both I.A.10 and I.A.11 is Section II (Monitoring, Maintenance, and Recordkeeping Procedures). IEUs are a sub-category of all the emission units covered by the AOP. We believe that for IEUs, limiting the monitoring to only Sections II.A.1(a) through II.A.1(c) and II.A.1(e) through II.A.1(f), is sufficient. However, citing only Sections II.A.1(c) & (e) as the monitoring method is not sufficient. The regulatory citation in AOP section V.Z has been changed to Sections II.A.1(a) through II.A.1(c) and II.A.1(e) through II.A.1(f) instead of Puget Sound Clean Air Agency Regulation 7.09(b) and 9.20.*

52) Page 186: Section VIII Appendixes, add EPA reference test Method 6C and 26A to the table.

***Response:** Changes made as requested.*

53) Page 188: Please add the following attachments to the list.

14. David S Kircher letter dated August 10, 1999 to Charles Austin re Small Container Used for Immersion Cleaning with Acetone.

15. Abigail C Lee letter dated August 1, 1996 to Chris Morris re Airplane Cleaning Operations Boeing Everett Facility.

16. A. Lee letter February 26, 1993 to J. Johnston re Confirmation of Exemption from PSAPCA O&M Plan Requirements for Fume Hoods and Ovens.

17. A McIntyre email January 2, 2003 to J. Fosberg re Meaning of "month" and "week" requested December 18, 2002.

***Response:** Attachments were added as requested. The description of the 1993 A. Lee letter was modified to more closely follow the content of the letter.*

11. 4. 2. Statement of Basis Comments

1) Page 11: Please correct a typo under Section 5.2.1.

…The actions include: 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);…

Response: *Change made as requested.*

2) Page 13: Please change the second sentence in the second paragraph of Section 5.2.2 to correct what appears to be a grammatical error.

Opacity monitoring is a surrogate to performing a Method 5 test, with Boeing taking corrective action if any visible emissions are noted.

Response: *Change made as requested.*

3) Page 20: Please update the equipment information as shown below.

Bldg.	*Col./Dr.*	*MSS/ID #*	*Order of Approval #*	*Install Date*	*Source Description*
17-62	*O/S East*	*58040*	*8702*	*1992*	*Scrubber No. 6*

Response: *Change made as requested.*

4) Page 21: Please correct a typo as shown below.

4. Technical considerations. The most likely failures of the scrubbers would be pump failure and nozzle pluggage. Boeing would likely detect pump failure by the monthly inspections and would likely detect nozzle pluggage by either pump operation or visible emissions, hence quarterly inspections for nozzle pluggage are justified. Also, pH would likely only change if there is a fundament change in the process or failure of the pH control systems, while such changes are unlikely, checking the pH serves as an independent check for process changes.

Response: *Change made as requested.*

5) Page 22-23: Please update the equipment list as shown below.

Bldg.	*Col/Dr*	*MSS/ID#*	*Order of Approval #*	*Date Installed*	*Source Description*	*Aerospace NESHAP Coatings with Inorganic HAP Used in Unit?*
17-45	*F7*	*3806*	*8747*	*2003*	*Spray coating booth – dry filter*	*Yes*
17-62		*6783*	*8835*	*2003*	*Spray coating booth – dry filter*	*Yes*

Response: *Change made as requested.*

6) Page 37: Please correct the equipment list as shown below.

Bldg.	*Col./Dr.*	*MSS/ ID#*	*Order of Approval #*	*Install Date*	*Source Description*	*Rated at 2000 cfm or less*
17-05	*Door S21*	*58144*	*8302*	*2001 (NOC date)*	*Baghouse (vents back to the bldg)*	
17-66	*O/S; Door 9*	*61877*	*7591*	*1998*	*Dust Collector, QA Lab*	*Y*

Response: *Change made as requested.*

7) Page 38: Please delete the following equipment from the list.

Bldg.	*Col./Dr.*	*MSS/ ID#*	*Order of Approval #*	*Install Date*	*Source Description*	*Rated at 2000 cfm or less*
17-66	*O/S; Door 9*	*61877*	*7591*	*1998*	*Dust Collector, QA Lab*	*Y*

Response: *Change made as requested.*

8) Page 41: Please update the equipment information as shown below.

Bldg	*Col./Dr.*	*MSS/ID#*	*Order of Approval #*	*Install Date*	*Source Description*
17-68	*O/S; Door 30*	*17376*	*8543*	*2002*	*NO2 Scrubber*
17-68	*O/S; Door 30*	*17377*	*8543*	*2002*	*H2S Scrubber*

Response: *Change made as requested.*

9) Pages 64 through 67: Make the following changes to Section 3.2.2. The change to the first bullet below, as well as other similar changes shown below, clarifies that, although for purposes of compliance with Section II.A.1(a) Boeing is only required to correct visible emissions during quarterly monitoring, visible emissions at any time may still be a deviation of the underlying requirement. Without this clarification, it would appear that Boeing has no incentive to correct a problem if it observed visible emissions outside of quarterly monitoring that had the potential to exceed the underlying requirement.

Statement of Basis Section Titled: Changes to Air Operating Permit Section II

- II.A.1(a) – Clarified that for purposes of complying with the quarterly opacity monitoring required by Section II.A.1(a), Boeing is only required correct visible emissions if observed during the quarterly monitoring (However, visible emissions may still be a deviation of the underlying applicable requirement). Added that in addition to eliminating visible emissions, Boeing could instead demonstrate compliance using the reference method. Added - "All observations using the opacity reference test method shall be reported according to V.Q.4 Method 9A Reports."

Response: *Change made as requested except that the word "inspection" was not changed to "monitoring". Section II.A.1(a) requires that Boeing conduct inspections. Therefore, the word "inspection" is correct in this case.*

- II.A.1(b) – Clarified that if Boeing cannot correct possible compliance problems within 24 hours and reports the potential problem according to Section V.Q.5, it would not be a deviation of the monitoring method. However, it may be a deviation of the underlying applicable requirement and not taking action as described would be a permit deviation.

Response: *Change made as requested.*

- II.A.1(c) – Clarified that if Boeing cannot correct possible compliance problems within 24 hours and reports the potential problem according to Section V.Q.5, it would not be a deviation of the monitoring method. However, it may be a deviation of the underlying applicable requirement. Clarified that the monitoring method only applies to applicable requirements for which it is an applicable monitoring method. Added "If Boeing observes potential compliance problems for which there are no monitoring requirements under an applicable requirement and corrects that problem within 24 hours, Boeing does not need to report the deviation under Section V.M. Compliance certifications or V.Q Reporting and does not need to record such action under Section V.O.1.4 of this permit." Changed the "NESHAP" to the more general term "requirement", as per NBF/Plant 2 Air Operating Permit.

Response: *Change made as requested.*

- II.A.1(d) – Clarified that if Boeing cannot correct possible compliance problems with in 24 hours and reports the potential problem according to Section V.Q.5, it would not be a deviation of the monitoring method. However, it may be a deviation of the underlying applicable requirement. Clarified that the monitoring method only applies to applicable requirements for which it is an applicable monitoring method. Added "and does not need to record such action under Section V.O.1.4 of this permit, except that deviations from the spray gun cleaning requirements under 40 CFR 63.744(c) must be reported in the Aerospace NESHAP semi-annual report in accordance with Section V.Q.3(b)(3)."

Response: *Change made as requested.*

- II.A.1(f) – Clarified that if Boeing cannot correct possible compliance problems with in 24 hours and reports the potential problem according to Section V.Q.5, it would not be a deviation of the monitoring method. However, it may be a deviation of the underlying applicable requirement. Clarified that the monitoring method only applies to applicable requirements for which it is an applicable monitoring method.

Response: *Change made as requested.*

- II.A.2(d)(ii) – Clarified that if Boeing cannot correct possible compliance problems with in 24 hours and reports the potential problem according to Section V.Q.5, it would not be a deviation of the monitoring method. However, it may be a deviation of the underlying applicable requirement.

Response: *Change made as requested.*

- II.A.2(d)(iii) – Added that the monitoring for visible emission while burning oil is not required during periods when natural gas is a reasonable option, such periods include testing, training, and calibration. Added that for purposes of complying with the visible emissions monitoring required by Section II.A.2(d)(iii) Boeing only has to take action if Boeing observes visible emissions during required monitoring (However, visible emissions may still be a deviation of the underlying applicable requirement). Added that in addition to eliminating visible emissions, Boeing could instead demonstrate compliance using the reference method. Added - "All observations using the opacity reference test method shall be reported according to V.Q.4 Method 9A Reports."

Response: *Changes made as requested.*

- II.A.2(d)(v) – Clarified that for purposes of complying with the visible emissions monitoring required by Section II.A.2(d)(v), Boeing only has to take action if visible emissions are observed during a required inspection (However, visible emissions may still be a deviation of the underlying applicable requirement). Added that in addition to eliminating visible emissions, Boeing could instead demonstrate compliance using the reference method. Added - "All observations using the opacity reference test method shall be reported according to V.Q.4 Method 9A Reports." Clarified that if Boeing cannot correct possible compliance problems with in 24 hours and reports the potential problem according to Section V.Q.5, it would not be a deviation of the monitoring method. However, it may be a deviation of the underlying applicable requirement.

Response: *Changes made as requested.*

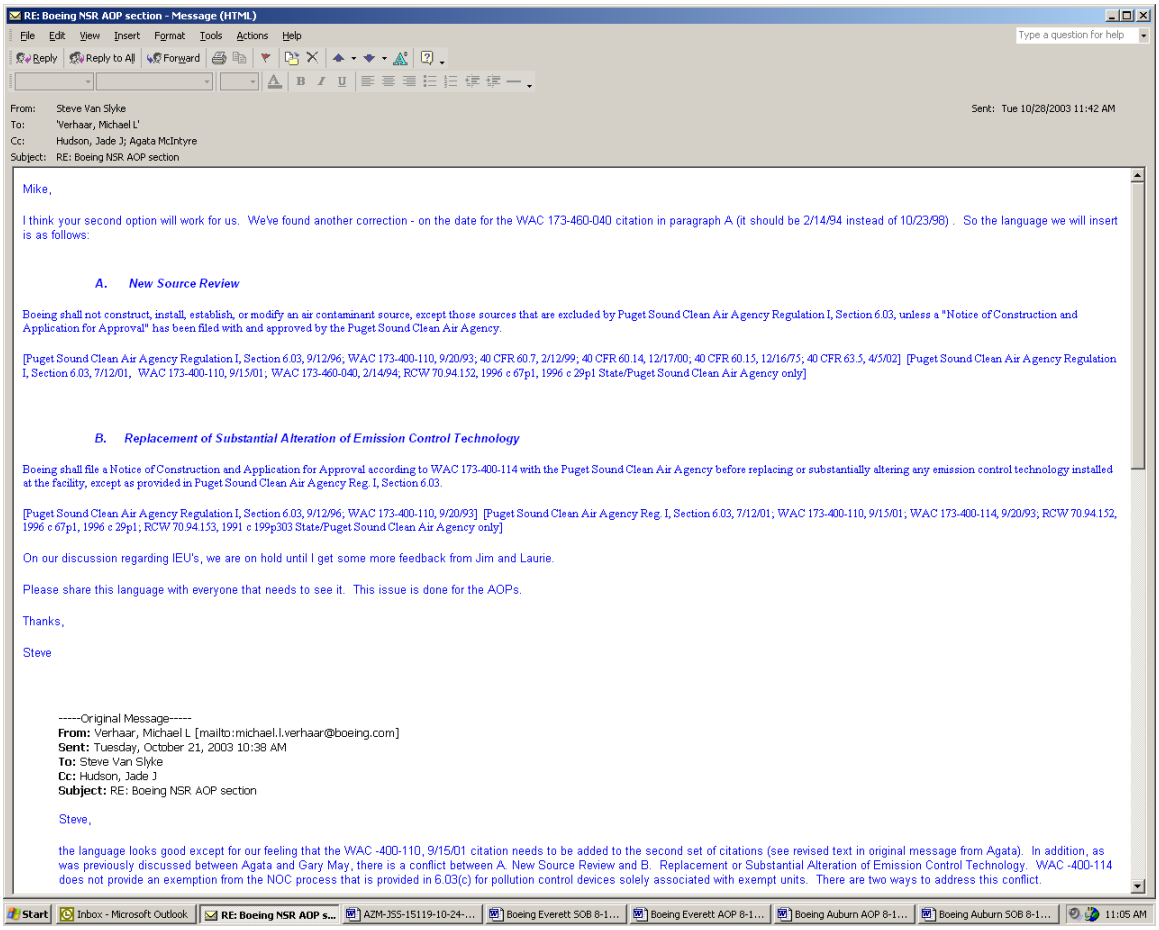
- II.A.2(d)(vi) – Clarified that Boeing must take corrective actions if Boeing identifies a potential compliance problem with respect to an applicable requirement for which that method is an applicable monitoring method. Clarified that if Boeing cannot correct possible compliance problems with in 24 hours and reports the potential problem according to Section V.Q.5, it would not be a deviation of the monitoring method. However, it may be a deviation of the underlying applicable requirement. Added that in addition to eliminating visible emissions, Boeing could instead demonstrate compliance using the reference method. Added - "All observations using the opacity reference test method shall be reported according to V.Q.4 Method 9A Reports."

Response: *Change made as requested.*

II.A.2(d)(xi) – Moved the monitoring method from II.A.2(k) so it is clear that this is part of the O&M Plan.
Response: *Change made as requested.*

11. 5 Additional Changes from 10-28-03 discussion with Boeing

Changes have been made to the AOP due to additional discussions with Boeing. The email below details these changes.



RE: Boeing NSR AOP section - Message (HTML)

File Edit View Insert Format Tools Actions Help

Reply Reply to All Forward

From: Steve Van Slyke Sent: Tue 10/28/2003 11:42 AM
To: 'Verhaar, Michael L'
Cc: Hudson, Jade J; Agata McIntyre
Subject: RE: Boeing NSR AOP section

Mike,

I think your second option will work for us. We've found another correction - on the date for the WAC 173-460-040 citation in paragraph A (it should be 2/14/94 instead of 10/23/98) . So the language we will insert is as follows:

A. New Source Review

Boeing shall not construct, install, establish, or modify an air contaminant source, except those sources that are excluded by Puget Sound Clean Air Agency Regulation I, Section 6.03, unless a "Notice of Construction and Application for Approval" has been filed with and approved by the Puget Sound Clean Air Agency.

[Puget Sound Clean Air Agency Regulation I, Section 6.03, 9/12/96; WAC 173-400-110, 9/20/93; 40 CFR 60.7, 2/12/99; 40 CFR 60.14, 12/17/00; 40 CFR 60.15, 12/16/75; 40 CFR 63.5, 4/5/02] [Puget Sound Clean Air Agency Regulation I, Section 6.03, 7/12/01, WAC 173-400-110, 9/15/01; WAC 173-460-040, 2/14/94; RCW 70.94.152, 1996 c 67p1, 1996 c 29p1 State/Puget Sound Clean Air Agency only]

B. Replacement of Substantial Alteration of Emission Control Technology

Boeing shall file a Notice of Construction and Application for Approval according to WAC 173-400-114 with the Puget Sound Clean Air Agency before replacing or substantially altering any emission control technology installed at the facility, except as provided in Puget Sound Clean Air Agency Reg. I, Section 6.03.

[Puget Sound Clean Air Agency Regulation I, Section 6.03, 9/12/96; WAC 173-400-110, 9/20/93] [Puget Sound Clean Air Agency Reg. I, Section 6.03, 7/12/01; WAC 173-400-110, 9/15/01; WAC 173-400-114, 9/20/93; RCW 70.94.152, 1996 c 67p1, 1996 c 29p1; RCW 70.94.153, 1991 c 199p303 State/Puget Sound Clean Air Agency only]

On our discussion regarding IEU's, we are on hold until I get some more feedback from Jim and Laurie.

Please share this language with everyone that needs to see it. This issue is done for the AOPs.

Thanks,

Steve

-----Original Message-----
From: Verhaar, Michael L [mailto:michael.l.verhaar@boeing.com]
Sent: Tuesday, October 21, 2003 10:38 AM
To: Steve Van Slyke
Cc: Hudson, Jade J
Subject: RE: Boeing NSR AOP section

Steve,

the language looks good except for our feeling that the WAC -400-110, 9/15/01 citation needs to be added to the second set of citations (see revised text in original message from Agata). In addition, as was previously discussed between Agata and Gary May, there is a conflict between A. New Source Review and B. Replacement or Substantial Alteration of Emission Control Technology. WAC -400-114 does not provide an exemption from the NOC process that is provided in 6.03(c) for pollution control devices solely associated with exempt units. There are two ways to address this conflict.

Start | Inbox - Microsoft Outlook | RE: Boeing NSR AOP s... | AZM-355-15119-10-24-... | Boeing Everett SOB 8-1... | Boeing Everett AOP 8-1... | Boeing Auburn AOP 8-1... | Boeing Auburn SOB 8-1... | 11:05 AM

11. 6 Additional Changes from 12-10-03 discussion with Boeing

> -----Original Message-----
> From: Hudson, Jade J
> Sent: Wednesday, December 10, 2003 1:48 PM
> To: 'AgataM@pscaa.org'
> Cc: Weickmann, Peter H; Cierebiej, Edward J; Welch, Neva M
> Subject: Comments to Proposed Auburn AOP
>
> Agata,
>
> Below are our comments to the proposed Auburn AOP dated 12-04-03.
>
> 1) Page 10 (I.A.6): The last sentence in the second paragraph under the enforceable requirement, please correct the regulatory citation from Reg I: 911(a) to Reg I: 9.11(a).
Response: *Change made as requested.*
> 2) Page 17 (I.B.1): Please delete an extra word in the emission unit description as shown below.
>

> DESCRIPTION: This section includes the equipment listed below and all activities associated with chemical process tankline operations except for and the NO2 and H2S scrubbers which are listed elsewhere in the permit. Chemical mill masking operations not covered by EU 2 are also listed. For the purpose of defining an > "> emission unit> "> in this permit, each piece of equipment listed below is considered a separate emission unit.
Response: *Deleted the extra word "and" as requested.*

> 3) Page 45 (EU 2.67): Please correct the regulatory citation as shown below.
>
> EU 2.67 40 CFR 63.745(g)(2)(i)(C) (12/8/00) For existing booths or hangars where primers or topcoats containing inorganic HAPs are spray applied, the air stream must be exhausted through an air pollution control system that meets or exceeds the efficiency data points in Tables 1 and 2 and is approved by the permitting authority. Alternatively, may choose to comply with 40 CFR 63.745(g)(2)(i)(A), EU 2. 65, or 40 CFR 63.745(g)(2)(i) (B) (B), EU 2. 66. II.A.2(c) Documentation on File
Response: *Deleted the extra "(B)" as requested.*

> 4) Page 58: Please delete MSS# 56105 from the heading (t) Order of Approval 8506. The reason for deleting this unit was provided during the public comment period on July 17, 2003 (see comment item No. 11).
Response: *Change made as requested.*

> 5) Page 58 (EU 2.121): Please correct the date for the Order of Approval #8506 Condition #4 from 5/30/01 to 3/29/02.
Response: *Change made as requested.*

> 6) Page 61 to 62 (EU 2.128 to EU 2.130): Please change the regulatory citation date from 6/13/01 to 6/13/91. An example is shown below.
> Puget Sound Clean Air Agency Reg I: 9.16(b) (7/12/01) (State Only). This requirement will become federally enforceable upon adoption into the SIP and will replace the 6/13/01 6/13/91 version of Regulation I Section 9.16.
Response: *Change made as requested.*

> 7) Page 88 (I.B.5): Please revise the description as shown below.
> DESCRIPTION: This section includes all activities and equipment associated with combustion of natural gas and fuel oil. Fuel burning equipment listed in this section is not subject to the New Source Performance Standards (Subpart Dc).
> For the purpose of defining an > "> emission unit> "> in this permit, each piece of equipment listed below is considered a separate emission unit.
Response: *Added "and fuel oil" as requested. In addition in the sentence that starts out with "This section includes all activities and equipment…" I took out the word "all". This word may be misleading since there are two emission units with fuel burning equipment in the Air Operating Permit.*

> 8) Page 156 (Section II.A.2(i)): Please delete February 1, 2000 from this requirement. This requirement only applies if we received regulated waste greater than 1 megagram. Since this requirement has not been triggered, the initial determination date is inaccurate.
Response: *Deleted "February 1, 2000" from this requirement. Instead of the term "February 1, 2002" the AOP now states "Boeing shall review and update, as necessary, this determination at least once every 12 months following the date of the initial determination of the average VOHAP concentration for the off-site material stream."*

> 9) Page 160 (Section IV): Please clarify the introduction to this section as shown below.
> Boeing shall file notification where applicable and obtain the necessary approval from the Puget Sound Clean Air Agency before conducting any of the following:
Response: *Added the term "where applicable" as requested.*

> 10) Page 160 (Section IV.C): Please update the regulatory citation date as shown below.
> Boeing shall comply with Puget Sound Clean Air Agency Regulation III, Article 4 when conducting any asbestos project, renovation or demolition activities at the facility. [Puget Sound Clean Air Agency Regulation III, Article 4, 7/13/00 2/27/03]
Response: *Updated Section IV.C with the most recent version of Puget Sound Clean Air Agency Regulation III Article 4. This update is slightly different than that proposed by Boeing in that it details the most recent approval dates for each of the various sections that are part of Article 4.*

> 11) Page 157*(Section V): Please correct the page number from here until the end of the permit.
> * Please note that this is the uncorrected page number.
Response: *Change made as requested.*

> 12) Page 158*(Section V.M): Please change the certification period as shown below.>
> Boeing shall submit a certification of compliance with permit terms and conditions once per year. The first such certification shall cover the period from permit issuance to December 31, 2003 2004.
Response: *As requested, the date Dec. 31, 2003 has been changed to Dec. 31, 2004.*

> 13) Page 159*(Section V.P.1): Please change a couple of typos as shown below.
>
> 1. General Data Recovery
> If the specific monitoring and recordkeeping requirements in Section II of this permit are silent on data recovery provisions data recovery is assumed to be 100%. However, no date data need be collected during any period that the monitorin monitored process does not operate.
Response: *As requested, the term "date" has been changed to "data", and the term "monitorin" has been changed to "monitored".*

> 14) Page 170*(Section V.Q.6): Please revise the sentence as shown below. This comment was provided during the public comment period on July 17, 2003 (see comment item No. 48).
> Notice of changes not requiring a permit revision, including 502(b)(10) changes and SIP authorized emission trading and trading under an established emission cap.
> (VI.C Changes not Requiring Permit Revisions) WAC 173-401-722 7 days prior to making a change.
Response: *Boeing Auburn does not currently have a permit to conduct emission trading under an existing emission cap. Approval of a permit allowing such trading would likely require that the Air Operating Permit be opened and modified. The Puget Sound Clean Air Agency will defer adding a provision for trading under an established emission cap until such time as a permit is approved to allow such trading.*

> 15) Page 174*(Section V.Q.7): Please add one more item as shown below to the table. This comment was provided during the public comment period on July 17, 2003 (see comment item No. 49).
> N. 12 WAC 173-401-645(d) 11/4/93 Notice of Emergency
> (V.R Emergencies) Within 2 days of exceeding emission limits.
Response: *Change made as requested.*

> 16) Page 177*(Section V.Z): Please revise this section as shown below to be consistent with Renton's Draft Air Operating Permit dated 12/4/03.
> Insignificant emission units and activities at Boeing are subject to all applicable requirements set forth in Sections I.A, III and IV. This permit does not require testing, monitoring, reporting or recordkeeping for insignificant emission units or activities, except as required by Sections II.A.1(a) through II.A.1(c), and II.A.1(e), and II.A.1(f) through II.A.1(g) of this permit. For insignificant emission units, the testing, monitoring, reporting, or recordkeeping requirements identified are applicable once a potential air operating permit deviation issue is initially observed and continue to be applicable until the potential deviation issue is resolved. Compliance with Sections II.A.1(a) through II.A.1(c), and II.A.1(e), and II.A.1(f) through II.A.1(g) of this permit shall be deemed to satisfy the requirements of WAC 173-401-615 and 173-401-630(1). [WAC 173-401-530(2)(c), 10/17/02]
Response: *As requested, we have removed the reference to Section II.A.1(g) for this citation. Per discussion with Jade Hudson of Boeing, Boeing purchases one fuel oil for use throughout the facility. This same oil is used by all units. As discussed in EU 5.4, the oil will need to be certified as being in compliance with Puget Sound Clean Air Agency Regulation I Section 9.08(a) in order for it to be used by emission units under EU 5. Therefore, whether or not Section II.A.1(g) is cited as a reference in Section V.Z of the AOP, the oil will in fact need to meet the requirements of Puget Sound Clean Air Agency Regulation I Section 9.08(a).*

> Please let me know if you have any questions. Thanks for the opportunity to review the permit prior to release to the EPA.
> Jade Hudson, > Boeing, Fab. Division, 253-931-4182

11. 7 Administrative Amendment May 12, 2004

On April 28, 2004 the Agency received a letter requesting a change in the name of the responsible official for this plant from Mary K. Armstrong, VP/GM for the Fabrication Division to Paul Nuyen, the Site Leader. The change has been made.

11. 8 Administrative Amendment June 29, 2006

On June 23, 2006 the Agency received a letter requesting a change in the name of the responsible official for this plant from Paul Nuyen, the Site Leader, to Sallie Bondy, the Site Leader (acting), the name of the environmental engineer from Jade Hudson to Gary May. Also the fax number for the facility was to be changed from (253) 351-4937 to (253) 351-1091. The changes have been made.

11. 9 Administrative Amendment August 24, 2006

On August 3, 2006 the Agency received a letter requesting a change in the name of the responsible official from Sally Bondy, the Site Leader (acting) to Dave Moe, Auburn Site Leader. The letter also requested that the name of the site contact be changed from Edward J. Cierebiej to Peter Weickmann. The changes have been made.

11. 10 Administrative Amendment March 9, 2010

On March 1, 2010, the Agency received a letter requesting a change in the name of the responsible official from Dave Moe, Auburn Site Leader to Larry Coughlin. The letter also requested changes to phone numbers for responsible official and site contact. The changes were made.

11. 1 Administrative Amendment November 16, 2011

On November 9, 2011, the Agency received a letter requesting a change in the name of the responsible official to Mark Ross. The changes were made, with the mail code and contact phone number updated as well.

11. 2 Administrative Amendment August 13, 2015

On May 28, 2015 the Agency received a letter requesting a change in the name of the responsible official to Jack Meehan. The changes were made, with the contact phone number updated as well.

11. 3 Administrative Amendment February 27, 2020

On January 24, 2020 the Agency received an email requesting a change in the name of the responsible official to Melissa Fleener and the site contact to Michael Verhaar. The changes were made, with the contact phone numbers updated as well.